LBT-N200/N200K/N200P

SERVICE MANUAL

AEP Model
Australian Model
PX Model
Mexican Model
Argentine Model
LBT-N200
E Model
LBT-N200K/N200P

LBT-N200/N200K/N200P is composed of following models. As for the service manual, it is issued for each component model, then, please refer to it.

COMPONENT MODEL NAME FOR LBT-N200/N200K/N200P

	LBT-N200			LBT-N200K	LBT-N200P
	AEP	AUS, MX	PX, AR	E, EA, SP, MY	E
COMPACT DISC DECK RECEIVER SYSTEM	HCD-N200			HCD-N200K	HCD-N200
SPEAKER SYSTEM	—	SS-LB200		SS-LB200	SS-LB200
STEREO TURNTABLE SYSTEM	PS-LX56P		—	———	PS-LX56P

- Abbreviation
  SP : Singapore model.
  EA : Saudi Arabia model.
  MX : Mexican model.
  MY : Malaysia model.
  AR : Argentine model.

SPECIFICATION

General

Power requirements
AEP model :
220 – 230 V AC, 50/60 Hz
AUS, MY models :
220 – 240 V AC, 50/60 Hz
MX model :
120 V AC, 50/60 Hz
E, PX, SP, AR models :
110 – 120 V or 220 – 240 V AC adjustble, 50/60Hz
Power consumption
95 W (EXCEPT AEP)
70 W (AEP)

Supplied accessories

AM loop aerial (1)
Remote RM-S200L (1)
Sony SUM-3 (NS) batteries (2)
FM wire aerial (1)
45-r/min adaptor (1) (for the model supplied with the turntable only)

COMPACT Hi-Fi STEREO SYSTEM

SONY®

PARTS LIST

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Abbreviation
  SP : Singapore model.
  EA : Saudi Arabia model.
  MX : Mexican model.
  MY : Malaysia model.
  AR : Argentine model.

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-467-988-11	COMMANDER, STANDARD (RM-S200L)	
	1-501-374-11	ANTENNA, LOOP	
	1-501-659-31	ANTENNA, (FM) (AEP)	
	1-501-659-41	ANTENNA, (FM) (EXCEPT AEP)	
	3-798-004-41	MANUAL INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)	
	3-798-004-51	MANUAL INSTRUCTION (GERMAN, DUTCH, ITALIAN) (AEP)	
	3-798-004-71	MANUAL INSTRUCTION (SPANISH) (MX)	
	3-798-004-81	MANUAL INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (E, AUS, PX, EA, AR, SP)	
	3-798-004-91	MANUAL INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (MY)	
	4-941-762-01	COVER, BATTERY (for RM-S200L)	
*	4-947-532-01	SNOW BOX (L) (PS) (N200:AEP, AUS, MX/N200P:E)	
*	4-947-533-01	SNOW BOX (R) (PS) (N200:AEP, AUS, MX/N200P:E)	
*	4-971-006-01	INDIVIDUAL CARTON (HCD-PS) (N200:AEP)	
*	4-971-007-01	INDIVIDUAL CARTON (HCD-SS) (N200:PX)	
*	4-971-008-01	INDIVIDUAL CARTON (HCD-SS) (N200:AR)	
*	4-971-009-01	INDIVIDUAL CARTON (HCD-SS) (N200K:E, EA)	
*	4-971-010-01	CUSHION (HCD) (four pieces in one package) (except MY)	
	4-971-010-11	CUSHION (HCD) (four pieces in one package) (MY)	
*	4-971-020-01	INDIVIDUAL CARTON (HCD-SS) (N200K:SP)	
*	4-971-446-01	INDIVIDUAL CARTON (HCD-SS-PS) (N200:MX)	
*	4-971-452-01	INDIVIDUAL CARTON (HCD-SS-PS) (N200P:E)	
	4-971-962-01	CUSHION (SS) (four pieces in one package) (except AEP)	
*	4-974-596-01	INDIVIDUAL CARTON (HCD-SS-PS) (N200:AUS)	
*	4-974-597-01	INDIVIDUAL CARTON (HCD-SS) (N200K:MY)	
	A-4674-087-A	TURNTABLE MAT ASSY (PS) (N200:AEP, AUS, MX/N200P:E)	

9-959-984-11

Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

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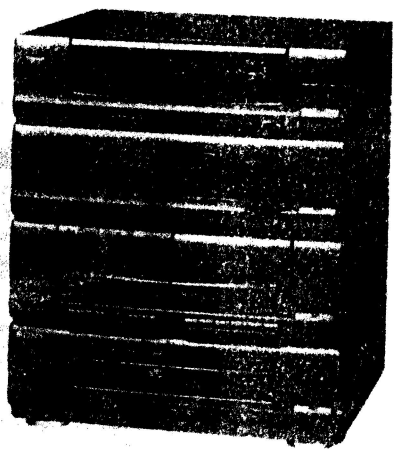
Quality Engineering Dept.

HCD-N200

SERVICE MANUAL

AEP Model
E Model
Australian Model
PX Model



This set is the tuner, deck, CD and amplifier section in LBT-N200 and LBT-N200P.

CD SECTION	Model Name Using Similer Mechanism	NEW
	CD Mechanism Type	CDM14-5BD19
	Base Unit Type	BU-5BD19
	Optical Pick-up Type	KSS-213BA
TAPE DECK SECTION	Model Name Using Similer Mechanism	HCD-N250
	Tape Transport Mechanism Type	TCM-130VW-H14

SPECIFICATIONS

CD player section

System Compact disc digital audio system
Laser Semiconducer laser
Wavelength 780~790nm

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range 87.5~108.0 MHz
Aerial FM wire aerial
Antenna terminals 75 ohm unbalanced
Intermediate frequency 10.7 MHz

AM tuner section

Tuning range
German and Italian models:
AM: 531~1,602 kHz
Other European models:
MW: 531~1,602 kHz
LW: 153~279 kHz
(with the tuning interval set at 3 kHz)
Latin American models:
AM: 530~1,710 kHz
(with the tuning interval set at 10 kHz)
Middle Eastern model:
MW: 531~1,602 kHz
(with the tuning interval set at 9 kHz)
SW: 5.95~17.90 kHz
Other models:
AM: 531~1,602 kHz
(with the tuning interval set at 9 kHz)
Aerial AM loop aerial
External aerial terminals
Intermediate frequency 450 kHz

Cassette deck section

Recording system
4-track 2-channel stereo
Frequency response
European models:
(DOLBY NR OFF)
40~13,000 Hz (± 3 dB), using Sony TYPE I cassette
40~14,000 Hz (± 3 dB), using Sony TYPE II cassette
Other models:
40~13,000 Hz (± 3 dB), using TYPE I cassette
40~14,000 Hz (± 3 dB), using TYPE II cassette
Wow and flutter
European models:
± 0.2% (DIN)
Other models:
0.1% (WRMS)

— Continued on next page —

MICROFILM

COMPACT DISC DECK RECEIVER

SONY®

Amplifier section

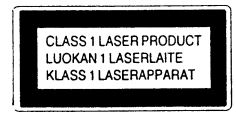
Peak music power output
(Except European models)
650 W
Continuous RMS power output:
European models:
20 W+20 W
(6 ohms at 1 kHz, DIN)
25 W+25 W
(6 ohms at 1 kHz, 5% THD)
Other models:
40 W+40 W
(6 ohms at 1 kHz, 5% THD)
Music power output: (European models)
50 W+50 W
(6 ohms at 1 kHz, 10% THD)
Inputs
PHONO (phono jack):
Sensitivity 3 mV, impedance
47 kilohms
Outputs
PHONES (phono jack):
accept headphones of 8 ohms or more.
SPEAKER:
accept impedance of 6 to 16 ohms.
SURROUND SPEAKER:
(Except European models)
Accept impedance of 16 ohms.
(For singapore, Malaysia and Mexico)
Accept impedance of 8 to 16 ohms.
(For other countries)

General

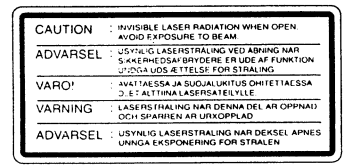
Power requirements
European models:
220–230 V AC, 50/60 Hz
Australian model:
220–240 V AC, 50/60 Hz
Malaysian model:
220–240 V AC, 50/60 Hz
Mexican model:
120 V AC, 50/60 Hz
Other models:
110–120 V or 220–240 V AC
adjustable, 50/60 Hz
Power consumption
European models:
70 W
Other models:
95 W
Dimensions
Approx. 355 × 425 × 355 mm
(w/h/d) incl. projecting parts
and controls
Mass
European models:
Approx. 8.0 kg
Other models:
Approx. 8.4 kg

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.


CAUTION : INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA LASERSÄTEILYLLE.
VARNING : LASERSTRÅLING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD.
ADVARSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN.

This caution label is located inside the unit.

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

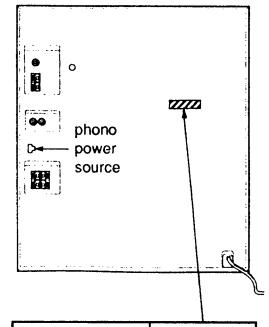
Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

MODEL IDENTIFICATION
— BACK PANEL —



	PARTS NO
AEP2 Model	4-969-781-1□
AEP1 Model	4-969-781-3□
German Model	4-969-781-4□
Italian Model	4-969-781-5□
AEP1 Model (Made in Malaysia)	4-969-781-7□
E Model	4-970-160-0□
Mexican Model	4-970-160-2□
PX Model	4-970-160-3□
Australian Model	4-970-160-4□

- **Abbreviations**
AEP1 : AEP model without phono power source.
AEP2 : AEP model with phono power source.

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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
SERVICING NOTE

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

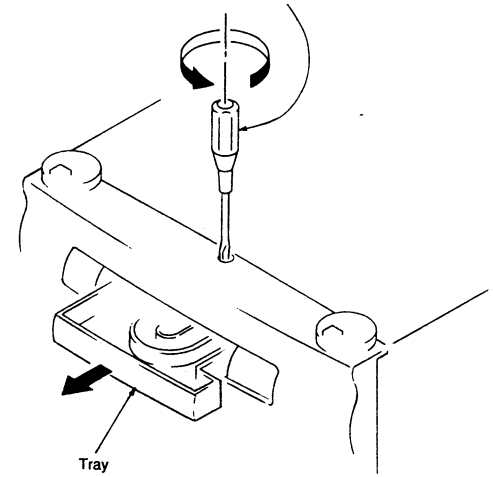
The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF

Insert a tapering driver into the aperture of the unit bottom, and turn in the direction of arrow (to OUT direction).



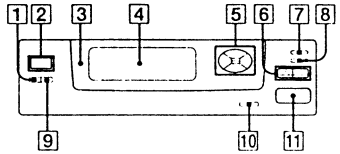
* To close the disc tray, turn the driver in the reverse direction (to IN direction).

Index to Parts and Controls

Refer to the pages indicated in parentheses for details on how to use the controls. Controls with an asterisk have indicators on themselves.

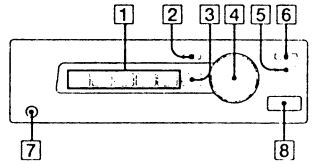
Front Panel

Tuner section



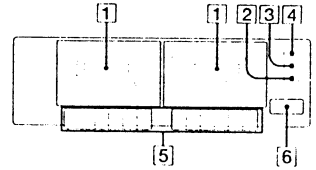
[1] CLOCK SET button (6)
[2] SYSTEM POWER switch (7)
[3] Remote sensor
[4] Display window (22)
[5] CURSOR CONTROL buttons (6, 17)
[6] TUNING (+/–) buttons (11)
[7] TUNING MEMORY button (12)
[8] TUNING MODE button (11)
[9] CLOCK ENTER/NEXT button (6)
[10] DISPLAY button (6, 8, 16)
[11] TUNER/BAND button (11, 15)

Amplifier section



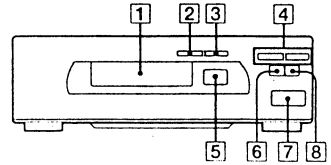
[1] Preset equalizer setting buttons (16)
[2] EQ MEMORY button (17)
[3] P.FILE button (16)
[4] VOLUME control (8, 16)
[5] S-SURROUND button (17)
[6] DBFB button (16)
[7] PHONES jack (16)
[8] PHONO button (7, 14)

Tape player section



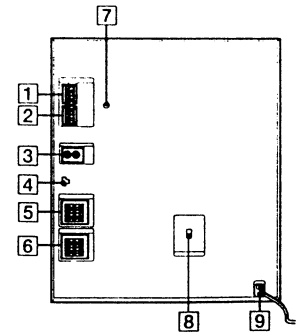
[1] Cassette compartments (13)
[2] DUBBING SPEED selctor (15)
[3] TAPE SELECT selector (13)
[4] DOLBY NR selctor (13)
[5] Tape operating buttons
▷ (play) (13)
▶▶ (fast rightward) (13)
◀◀ (fast leftward) (13)
■/⏏ (stop/eject) (13)
● REC (recording) (for deck B only) (14)
❚❚ PAUSE button (13)
[6] TAPE button (13)

CD player section



[1] Disc tray (8)
[2] PLAY MODE button (9)
[3] REPEAT button (10)
[4] ⏮◀◀/▶▶⏭ (AMS) buttons (8, 14)
[5] ⏏ OPEN/CLOSE button (8, 14)
[7] CD ▷ (play) button (8, 14)
[6] ❚❚ (pause) button (8, 14)
[8] ■ (stop) button (8)

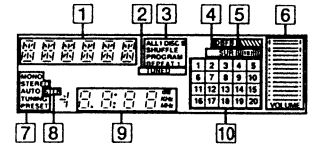
Rear Panel



[1] FM 75Ω terminal (4)
[2] AM terminal (4)
[3] PHONO IN jacks (4)
[4] POWER SOURCE terminal (4)
[5] SPEAKER connectors (4)
[6] SURROUND SPEAKER connectors*2 (18)
[7] ⏚ ground terminal (4)
[8] VOLTAGE SELECTOR*1 (5)
[9] AC power cord (5)

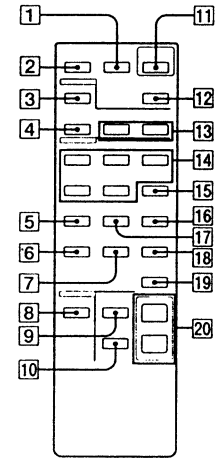
*1 Except for Latin American countries, Australia and European countries.
*2 Except for European countries.

Display Window



[1] Band/disc/track indications (6, 8, 11, 12, 15, 17)
[2] TUNED indications (11)
[3] CD play mode indication (9)
[4] SURROUND indication (17)
[5] DBFB indication (16)
[6] VOLUME indication (8)
[7] Tuner indication (11)
[8] STEP indications (15)
[9] Frequency/playing time indications (6, 8, 11, 12, 15, 17)
[10] Music calendar (8, 15)

Remote

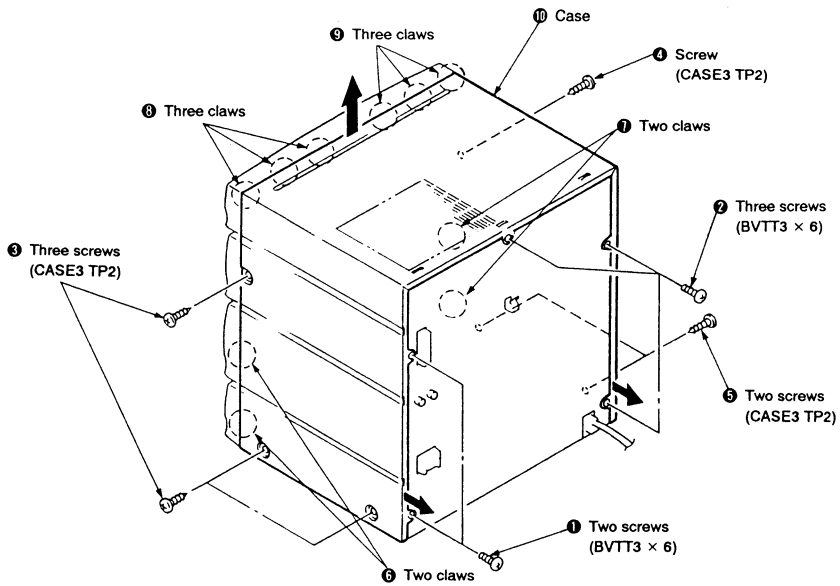


[1] DISPLAY button (6)
[2] FUNCTION button (8, 14)
[3] BAND button (11)
[4] STEREO/MONO button (11)
[5] CONTINUE button (9, 14)
[6] CHECK button (9, 14)
[7] CLEAR button (9)
[8] TAPE button (13)
[9] PRESET EQ button (16)
[10] P.FILE button (16)
[11] SYSTEM POWER button (7)
[12] SLEEP button (18)
[13] PRESET buttons (12)
[14] CD operating buttons
► (play) (9)
⏮ / ⏭ AMS* (9)
❚❚ (pause) (9)
■ (stop) (9)
* AMS: Automatic Music Sensor.
[15] REPEAT button (10)
[16] PROGRAM button (9)
[17] SHUFFLE button (9)
[18] EDIT button (14)
[19] DISC SKIP button (You cannot use this button with this model)
[20] VOL (volume) buttons (8)

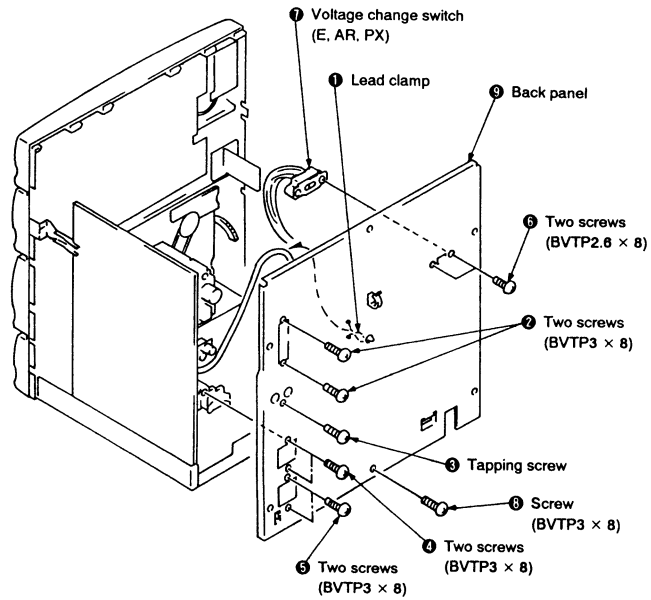
This section is extracted from instruction manual.

SECTION 3
DISASSEMBLY

3-1. CASE

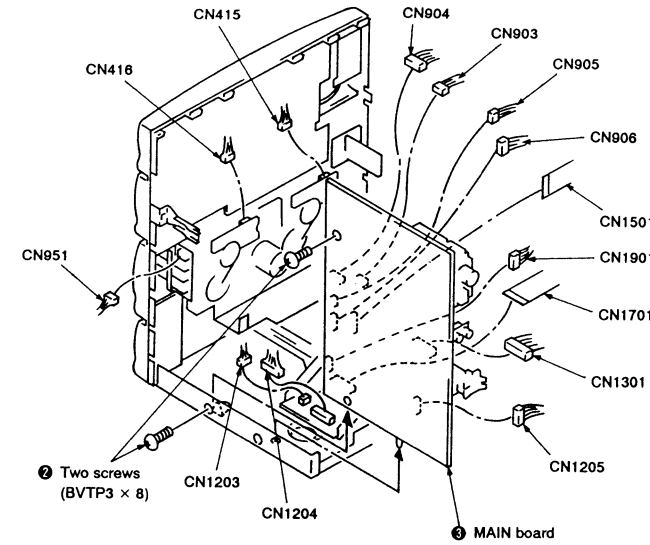

❿ Case
❾ Three claws
❹ Screw (CASE3 TP2)
❽ Three claws
❼ Two claws
❷ Three screws (BVTT3 × 6)
❸ Three screws (CASE3 TP2)
❺ Two screws (CASE3 TP2)
❶ Two screws (BVTT3 × 6)
❻ Two claws

3-2. BACK PANEL

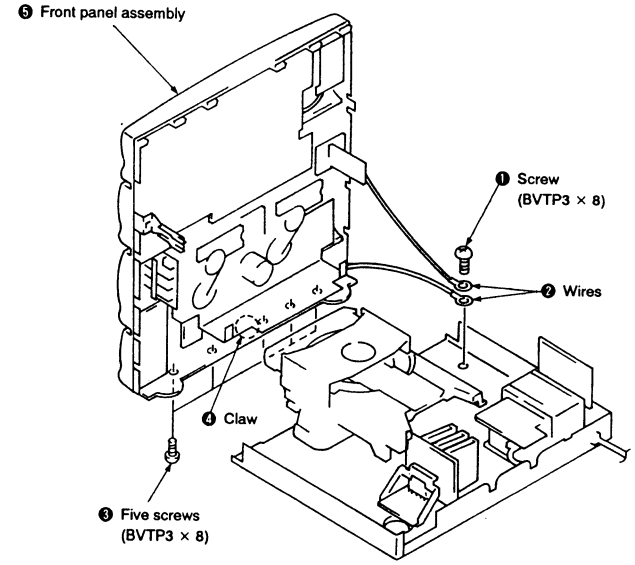

❼ Voltage change switch (E, AR, PX)
❶ Lead clamp
❾ Back panel
❻ Two screws (BVTP2.6 × 8)
❷ Two screws (BVTP3 × 8)
❸ Tapping screw
❽ Screw (BVTP3 × 8)
❹ Two screws (BVTP3 × 8)
❺ Two screws (BVTP3 × 8)

3-3. MAIN BOARD

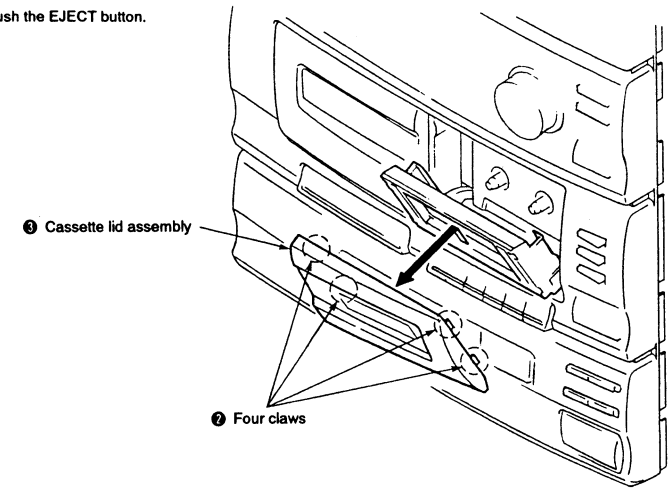
❶ Removal connector



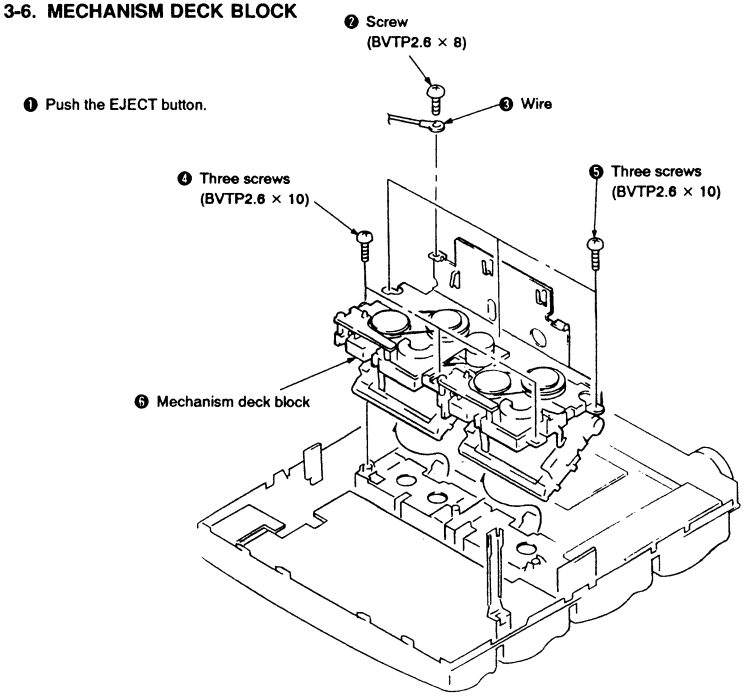
3-4. FRONT PANEL ASSY



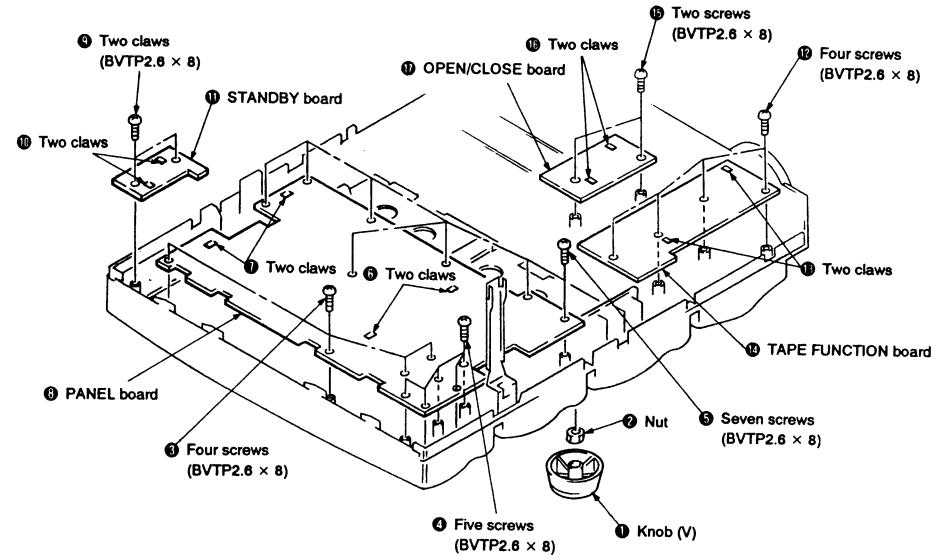
3-5. CASSETTE LID ASSY



3-6. MECHANISM DECK BLOCK

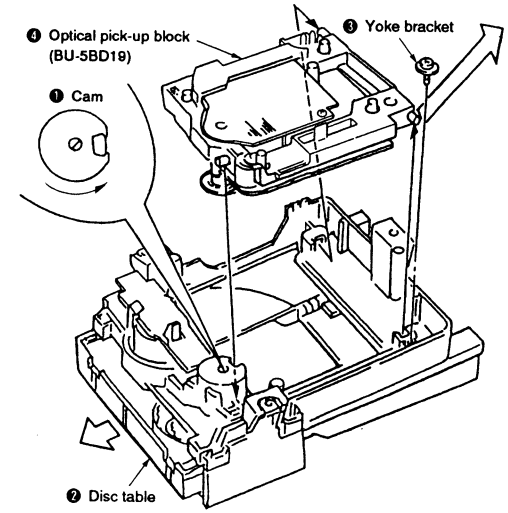


3-7. PANEL, STANDBY, TAPE FUNCTION, OPEN/CLOSE BOARD


⓯ Two screws (BVTP2.6 × 8)
⓬ Four screws (BVTP2.6 × 8)
⓰ Two claws
⓱ OPEN/CLOSE board
⓫ STANDBY board
⓭ Two claws
⓮ TAPE FUNCTION board
❾ Two claws (BVTP2.6 × 8)
⓭ Two claws
❼ Two claws
❻ Two claws
❽ PANEL board
❺ Seven screws (BVTP2.6 × 8)
❷ Nut
❸ Four screws (BVTP2.6 × 8)
❹ Five screws (BVTP2.6 × 8)
❶ Knob (V)

3-8. OPTICAL PICK-UP BLOCK

❶ Turn the cam to the direction of arrow (Counter clockwise) by minus screw driver.
❷ Take off the disc table.
❸ Remove the yoke bracket.
❹ Remove the optical pick-up block (BU-5BD19) to the direction of arrow.



SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab :
   record/playback heads — pinch rollers
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Mesurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	30—70g•cm (0.42–0.97oz•inch)
FWD Back tension	CQ-102C	1.5—5.5g•cm (0.020–0.076oz•inch)
FF/REW	CQ-201B	63g•cm or more (0.87oz•inch or more)

SECTION 5
ELECTRICAL ADJUSTMENTS

DECK SECTION **0 dB=0.775V**

1. Demagnetize the record/playback head with a head damagnetizer. (Do not bring the head demagnetizer close to the erase head.)
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-ch.

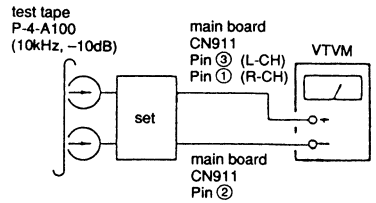
• Switches and controls should be set as follows unless otherwise specified.
TAPE SELECT switch : TAPE I
DOLBY NR switch : OFF

Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

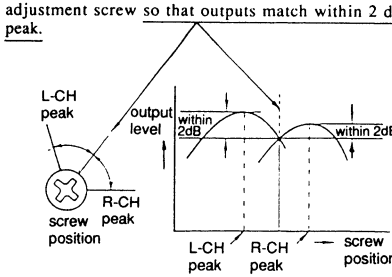
Record/Playback Head Azimuth Adjustment

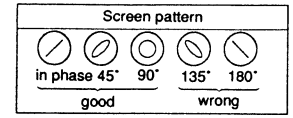
DECK A **DECK B**

Note : Perform this adjustments for both decks.
Procedure :
1. Mode : Playback (FWD)

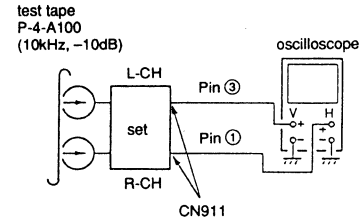


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 2 dB of peak.



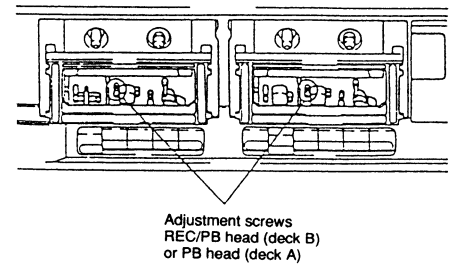


3. Mode : Playback



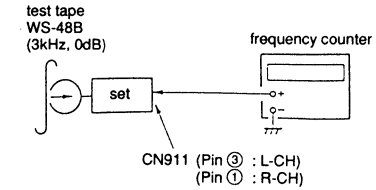
4. Repeat steps 1 to 3 in playback (REV) mode.
5. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location :



Tape Speed Adjustment **DECK A** **DECK B**

Procedure :
Mode : Playback



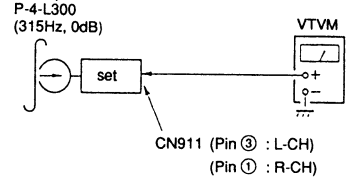
High speed adjustment (Must be first Adjustment deck B)
1. Short pin ① and ③ of CN912 on set "DUBBING SPEED" switch to "HIGH". Then at HIGH speed mode.
2. Adjust RV901 so that the frequency counter reads 6,000 ± 20 Hz.

Normal speed adjustment
1. Remove the short pin from CN912 on set "DUBBING SPEED" switch to "NORMAL". Then at NORMAL speed mode.
2. Adjust RV902 so that the frequency counter reads 3,000 ± 10 Hz.

Frequency difference between deck A and deck B the beginning of the tape should be within ± 1%.
Adjustment Location : main board

Playback Level Adjustment **DECK A** **DECK B**

Procedure :
Mode : Playback
test tape
P-4-L300
(315Hz, 0dB)

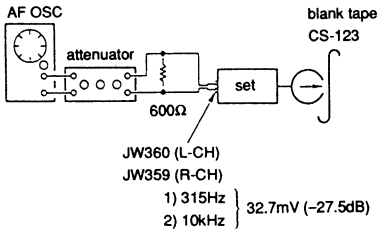


Deck A is RV702 (L-CH) and RV802 (R-CH),
Deck B is RV701 (L-CH) and RV801 (R-CH)
so that adjustment within adjustable limits as follows.

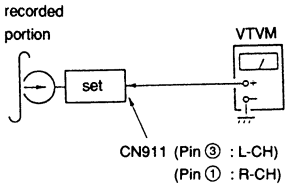
Adjustable limits :
CN911 PB level: 301.5 to 338.3 mV (–8.2 to –7.2 dB)
level difference between the channels: within ±1 dB
Adjust Location : main board

Record Bias Current Adjustment DECK B

Procedure :
1. Mode : record



2. Mode : Playback



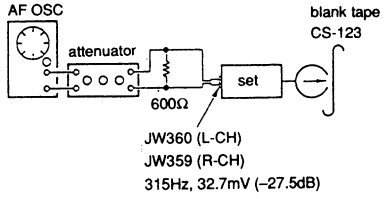
Confirm playback the signal recorded in step 1 become adjustable limits as follows.
If these levels do not adjustable limits, adjustment the RV704 (L-CH) and RV804 (R-CH) to repeat steps 1 and 2.

Adjustable limits : Playback output of 315 Hz to playback output of 10 kHz : 0±0.5 dB
Adjustment Location : main board

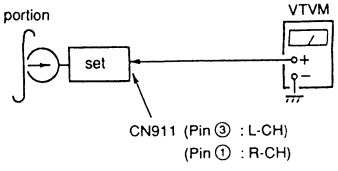
Record Level Adjustment DECK B

Setting :
TAPE SELECT switch : TYPE I

Procedure :
1. Mode: record



2. Mode: Playback

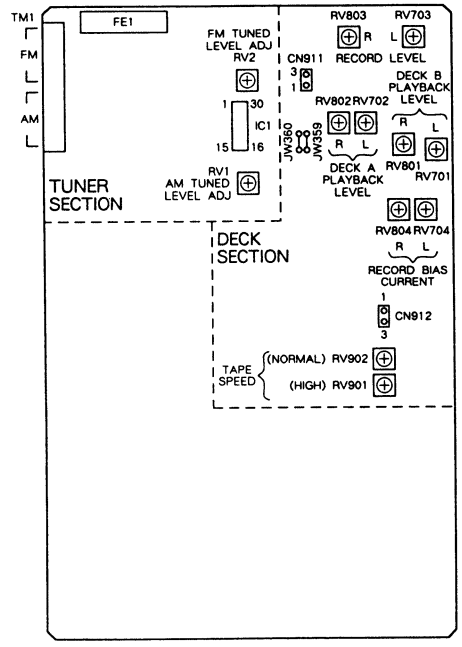


Confirm playback the signal recorded in step 1 become adjustable limits as follows.
If these levels do not adjustable limits, adjustment the RV703 (L-CH) and RV803 (R-CH) to repeat steps 1 and 2.

Adjustable limits :
CN911 PB level: 23.1 to 26.0 mV (–30.5 to –29.5 dB)

Adjustment Location : main board

[MAIN BOARD] (Component Side)

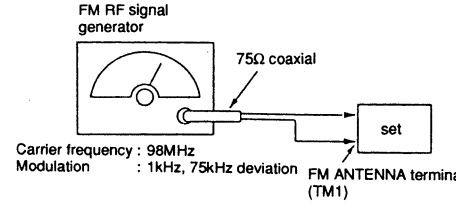


TUNER SECTION 0dB=1μV

Note : As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

FM Section Adjustment

Setting :



FM Tuned Level Adjustment

Band : FM

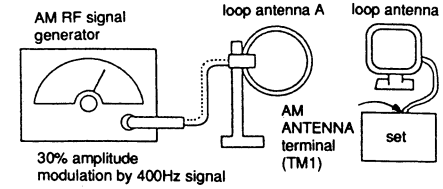
Procedure :
1. Supply a 17.8 μV (25dBμ) 98 MHz signal to the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV2 so that the TUNED indicator goes on.

Adjustment Location : main board

- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by trimmer capacitors.

AM Section Adjustment

Setting :



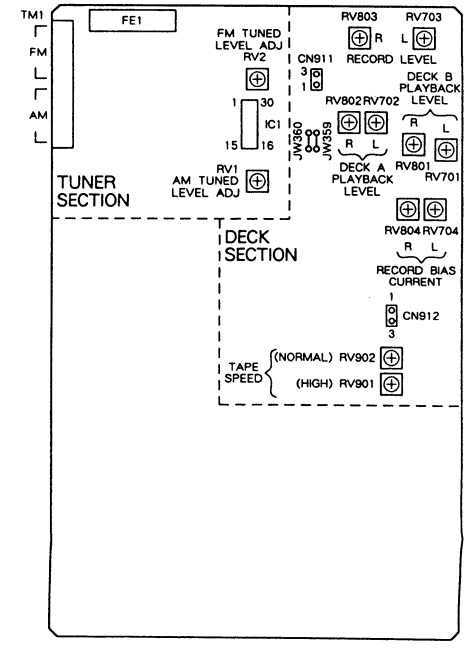
AM Tuner Level Adjustment

Band : AM

Procedure :
1. Set loop antenna A so that the loop antenna B input level becomes 0.56 mV (55 dBμ).
2. Tune the set to 1050kHz.
3. Adjust RV1 so that the TUNED indicator goes on.

Adjustment Location : main board

[MAIN BOARD] (Component Side)

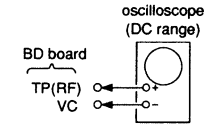


CD SECTION

Note :

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
5. Adjust the focus bias adjustment when optical block is replaced.

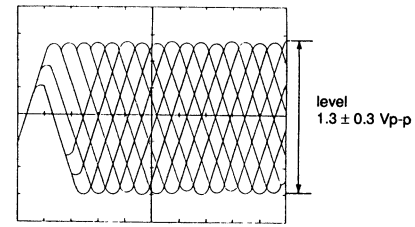
Focus Bias Adjustment



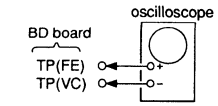
Procedure:

1. Connect oscilloscope to test point TP (RF). (GND terminal : VC)
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Adjust RV101 so that the waveform is clear.
   (Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.)
5. After adjustment, check the RF signal level.

• RF signal
VOLT/DIV : 200 mV
TIME/DIV : 500 nS



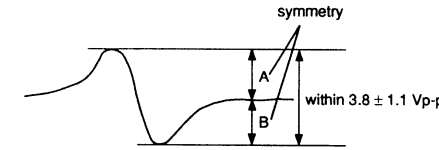
S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and GND by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3.8±1.1 Vp-p.

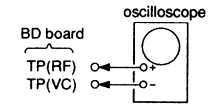
S-curve waveform



6. After check, remove the lead wire connected in step 2.

Note : • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check



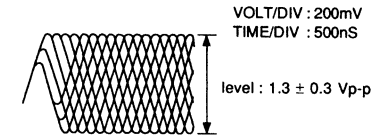
Procedure :

1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

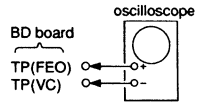
Note :

Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RF signal waveform

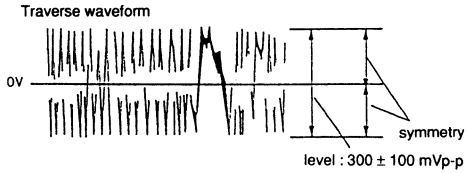


E-F Balance Check



Procedure :

1. Connect pin (56) of IC1501 on the main board to GND with a lead wire.
2. Connect oscilloscpe to test point TP (TEO).
3. Turned Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0Vdc, and check this level.



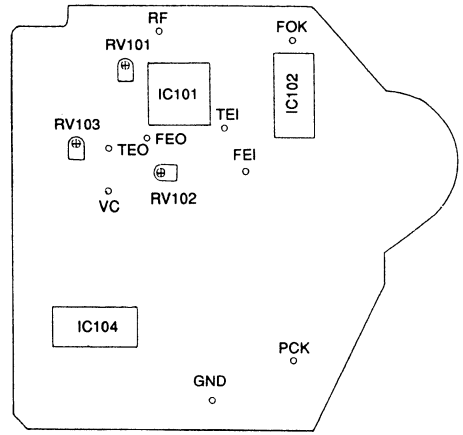
6. Remove the lead wire connected in step 1.

Focus/Tracking Gain Adjustment (RV102, RV103)

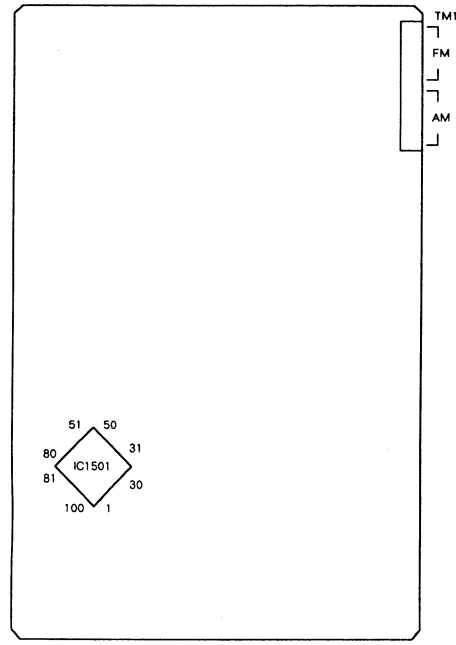
This gain has a margin, so even if it is slightly off.
There is no problem.
Therfore, do not perform this adjustment.
Please note that it should be fixed to mechanical center position when you moved and do not know original position.

Adjustment Location :

[BD BOARD] (Conductor Side)

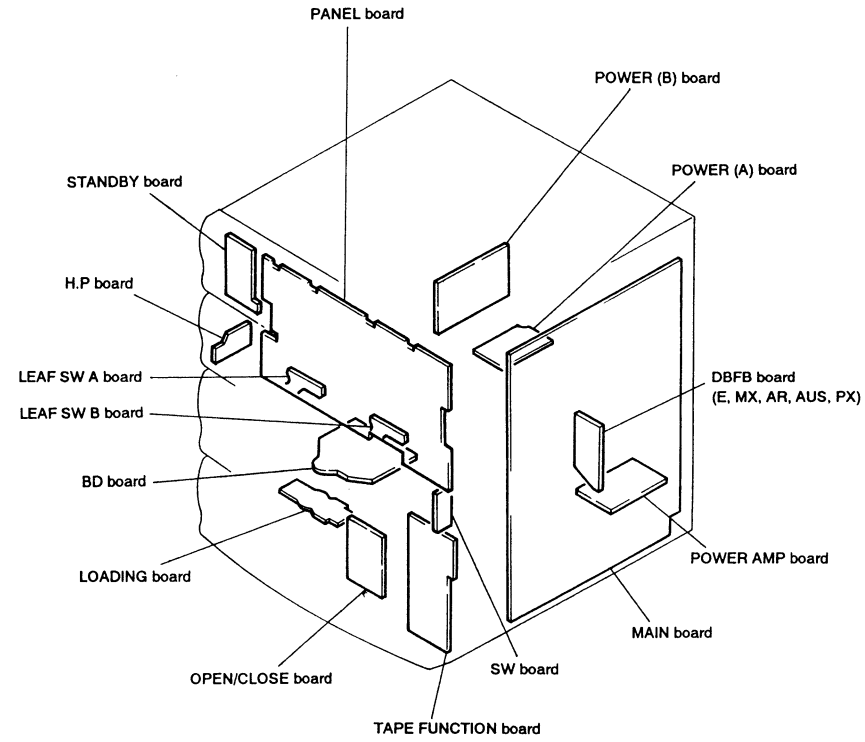


[MAIN BOARD] (Conductor Side)



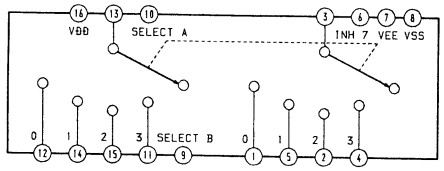
SECTION 6
DIAGRAMS

6-1. CIRCUIT BOARDS LOCATION

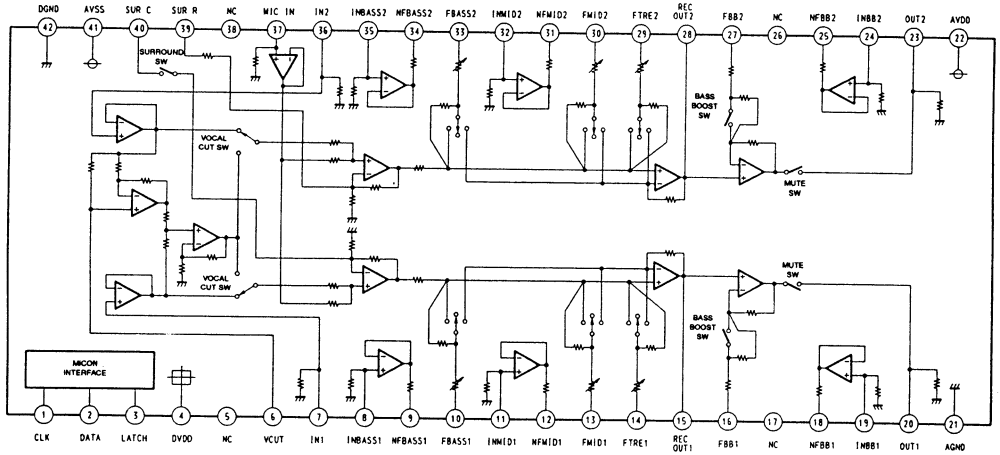


6-2. IC BLOCK DIAGRAMS — MAIN SECTION —

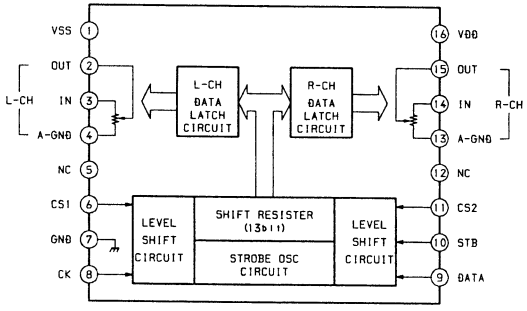
IC1002 MC14052BCP



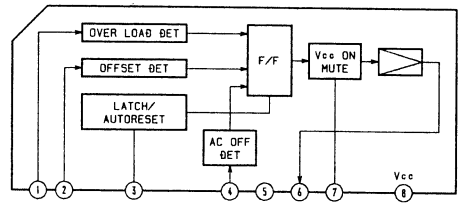
IC1101 M62423FP



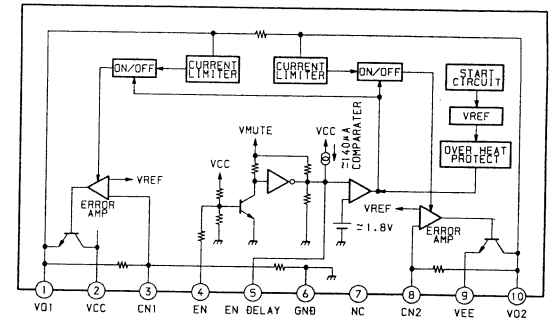
IC1131 TC9210P



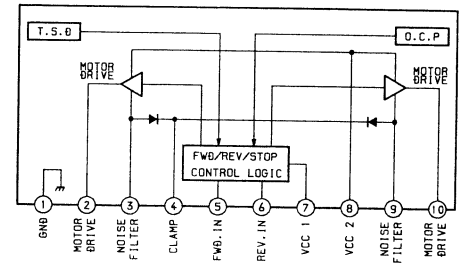
IC1202 μPC1237HA



IC1351 LA5617

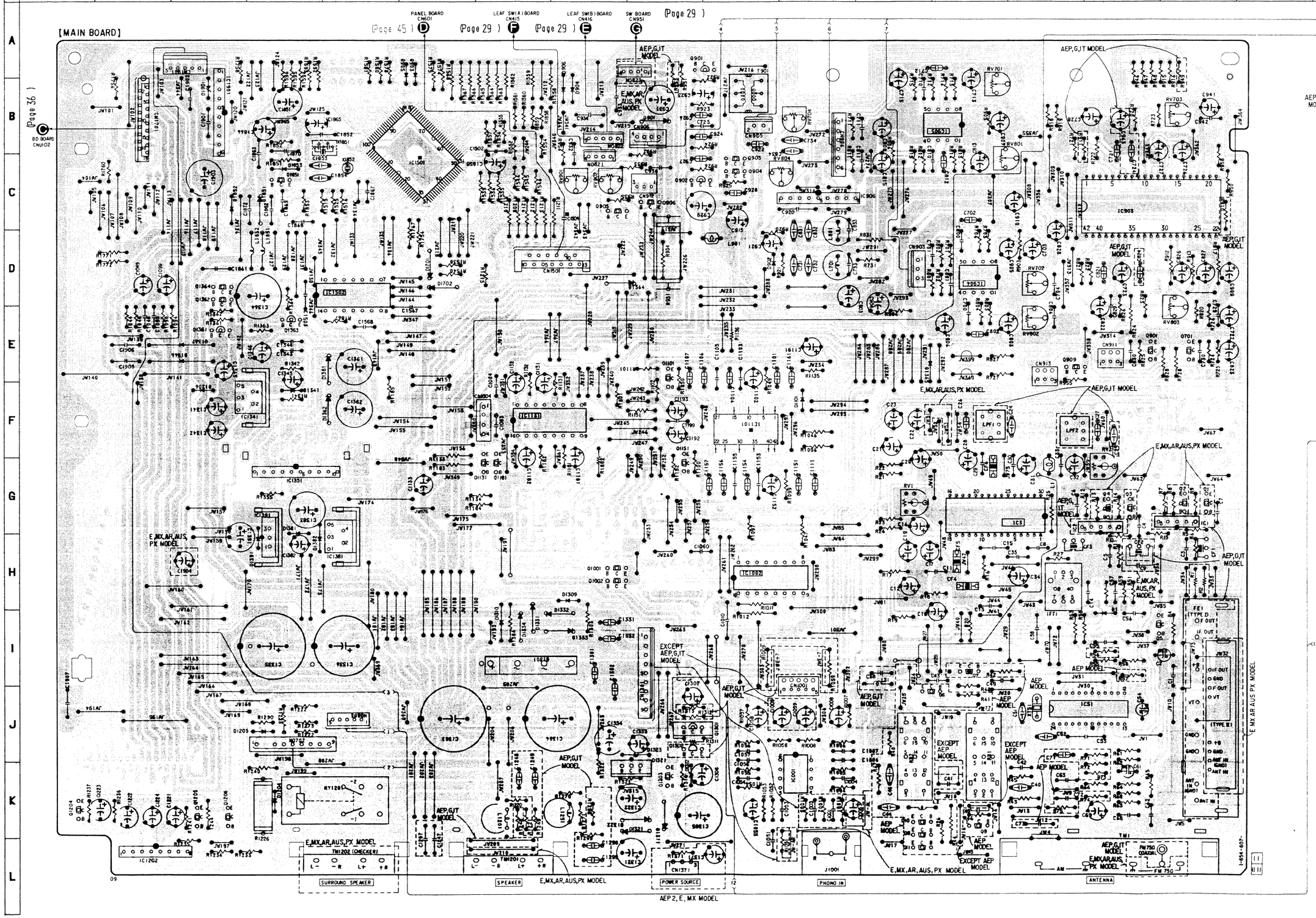


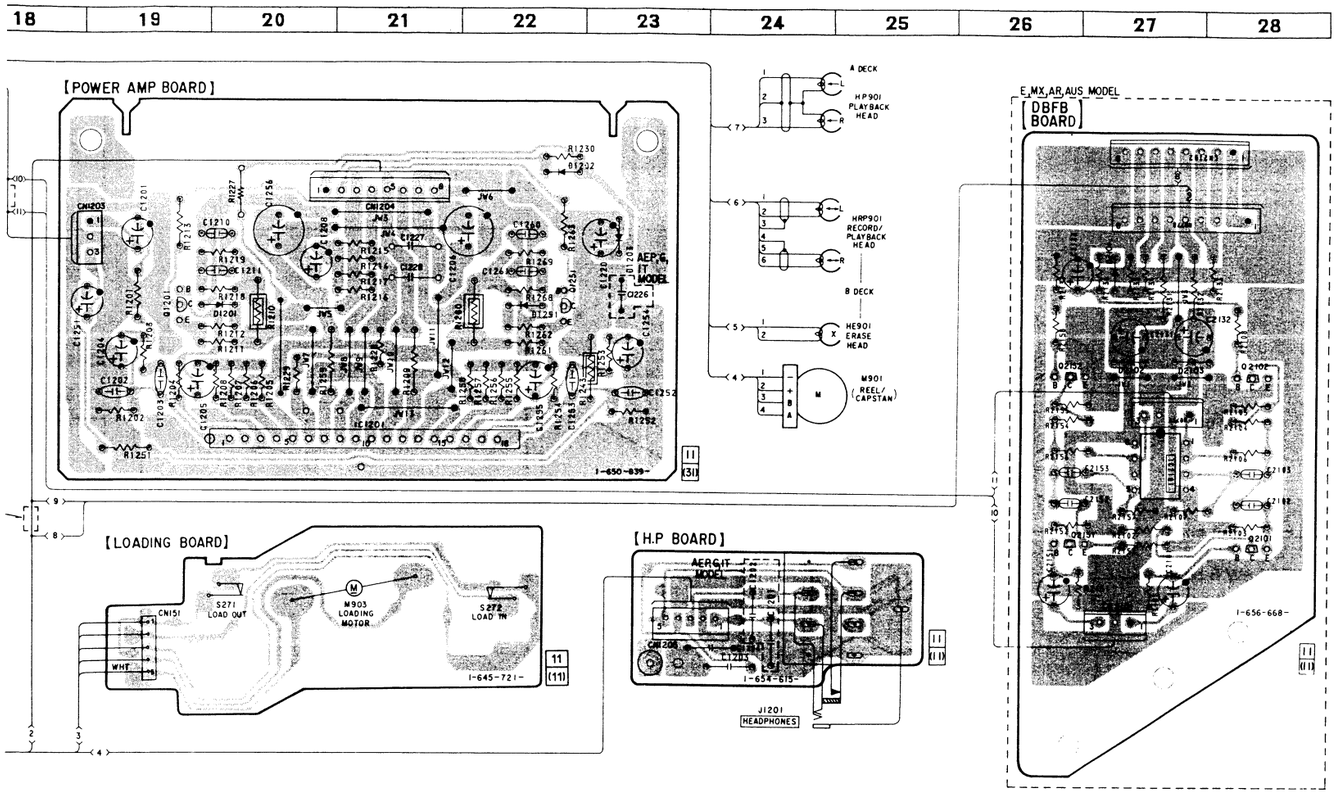
IC1901 LB1641

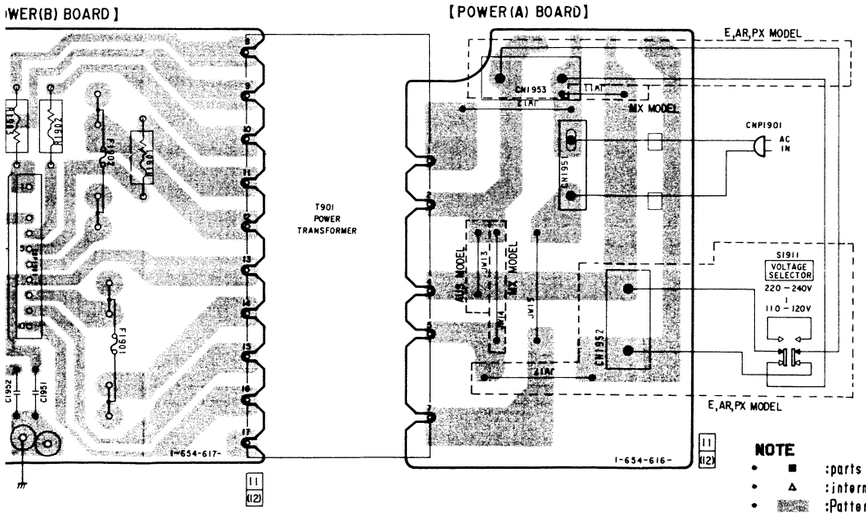


6-3. PRINTED WIRING BOARD — MAIN SECTION —

- See page 16 for Circuit Boards Location.
- See page 34 for Semiconductor Lead Layouts.







NOTE

- ■ :parts mounted on the conductor side.
- △ :internal component.
- ▒▒ :Pattern from the side which enable seeing.
- Abbreviation

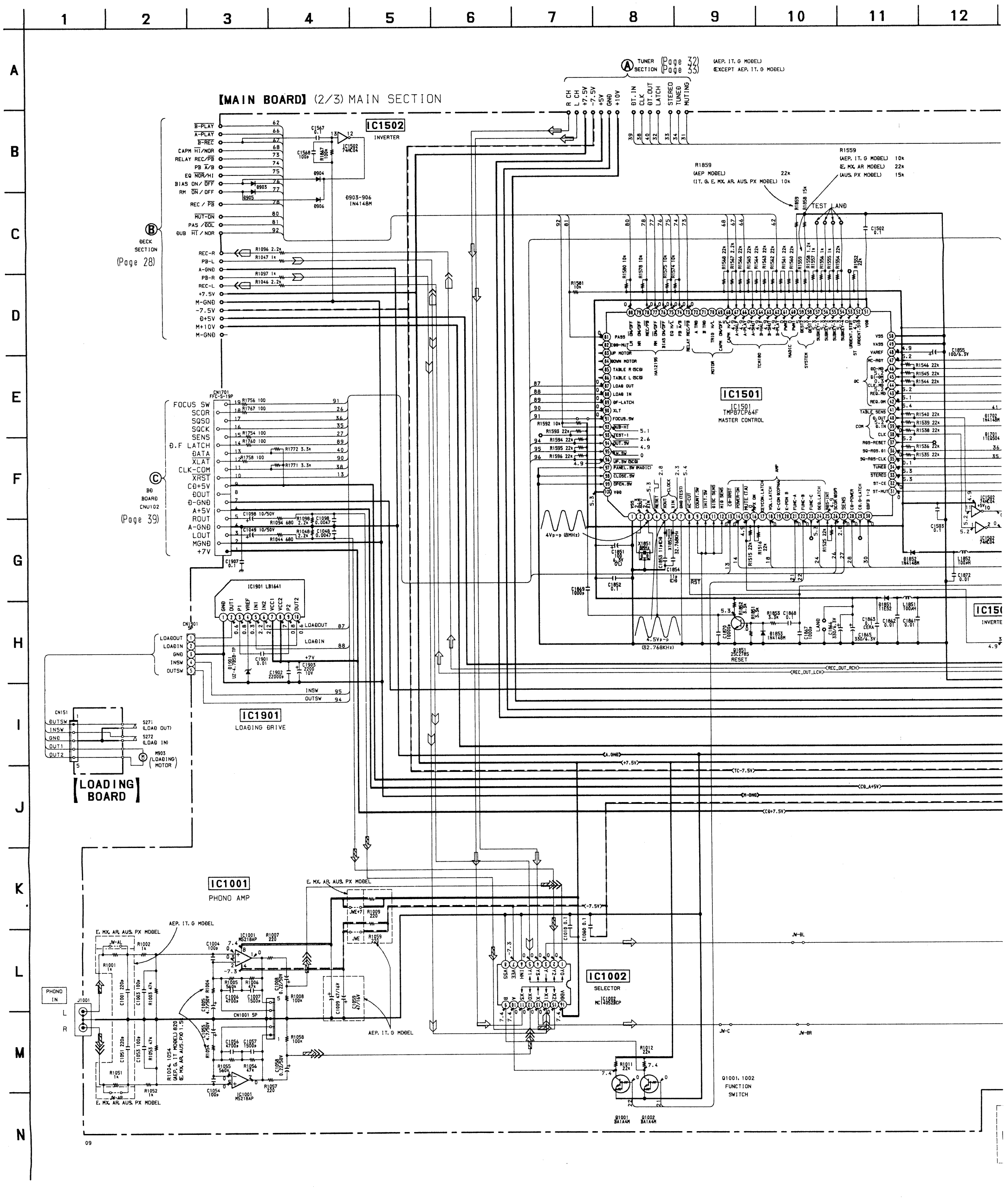
G :German model. AUS:Australian model.
IT :Italian model. AR :Argentine model.
MX :Mexican model.
AEP2:AEPmodel with power source for PS-LX56P.

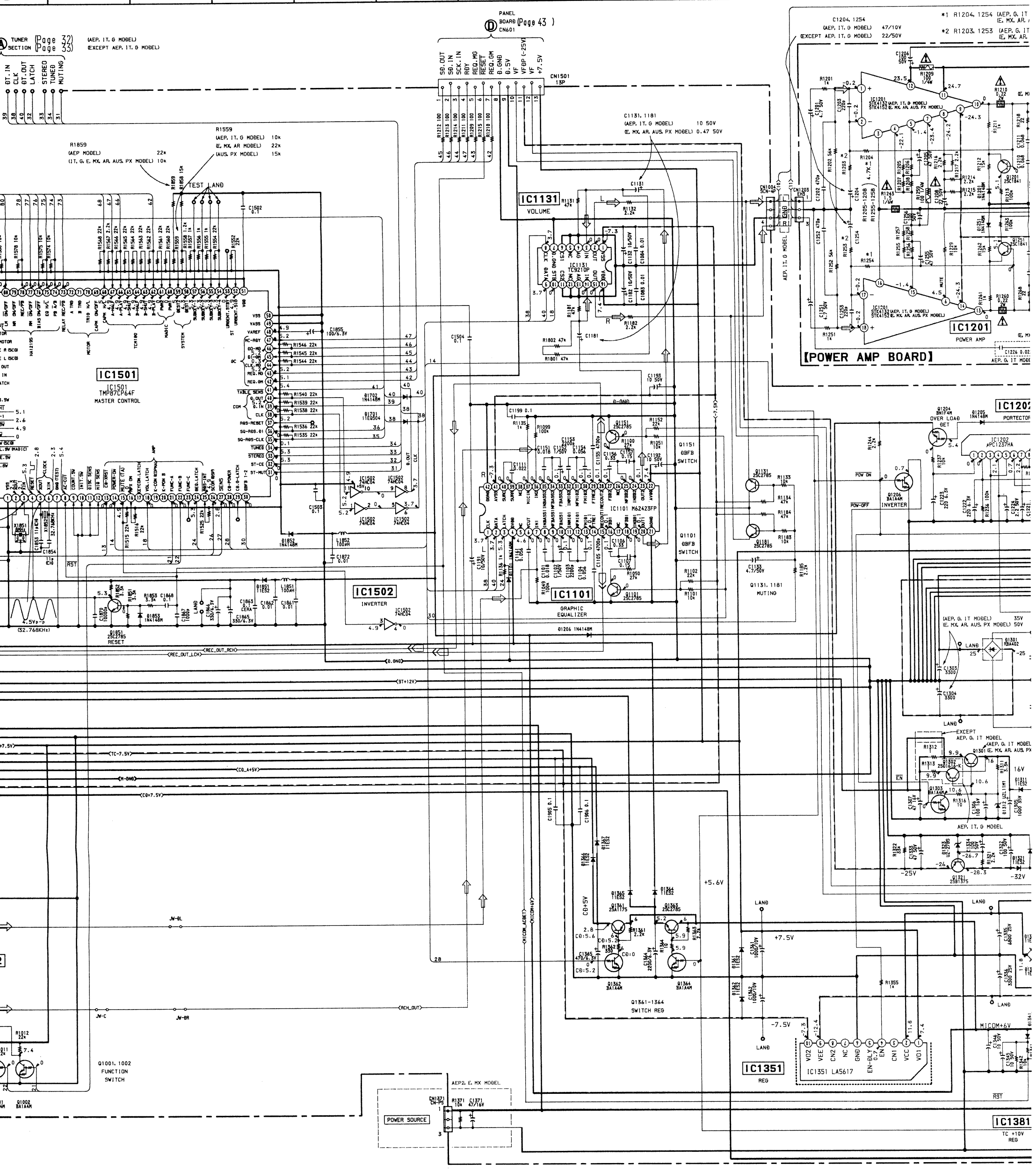
• Semiconductor Location

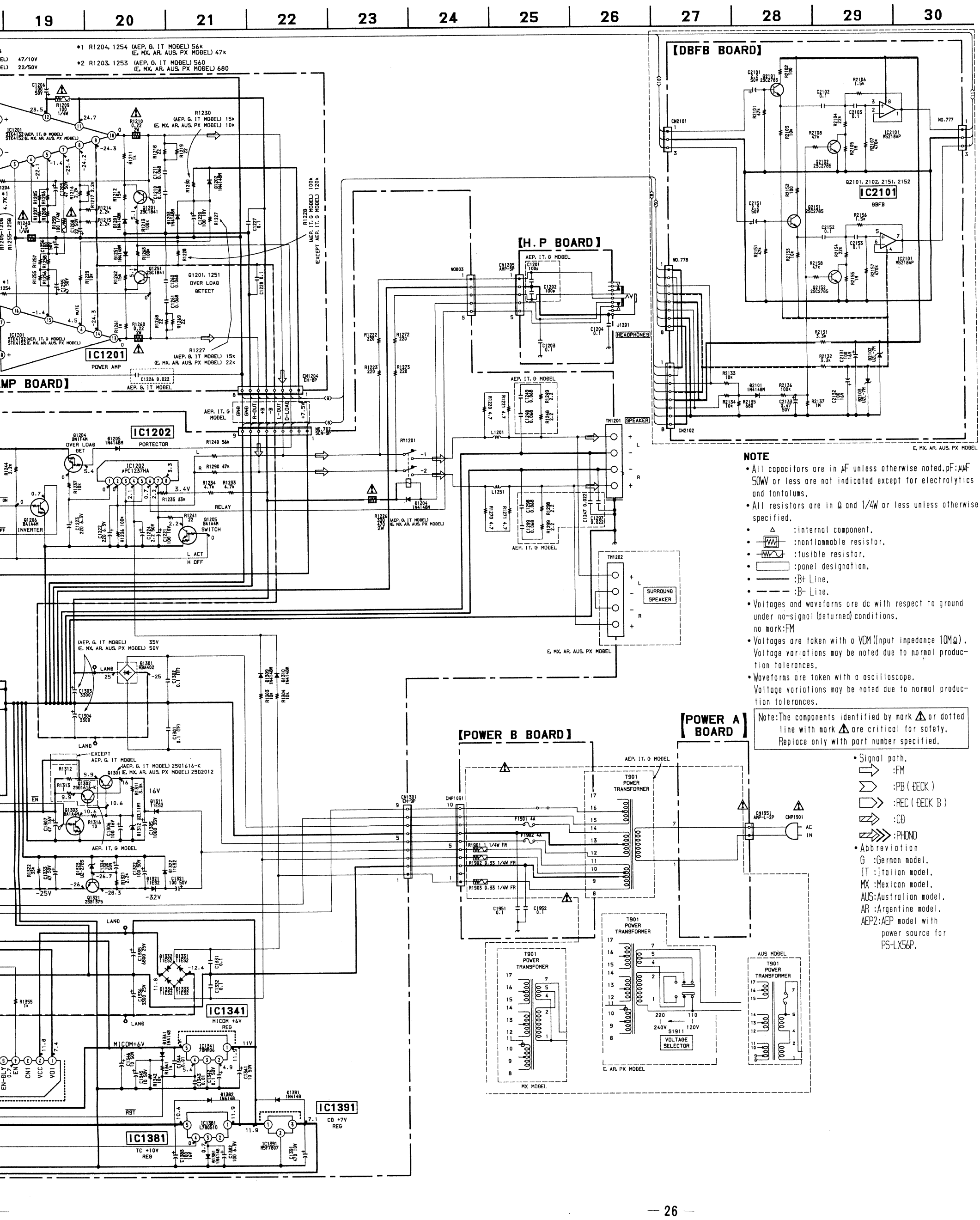
Ref. No.	Location	Ref. No.	Location
D1	H-15	IC1131	F-7
D901	B-9	IC1201	D-21
D902	D-10	IC1202	K-2
D903	A-6	IC1341	F-4
D904	A-8	IC1351	G-4
D905	A-6	IC1381	H-5
D906	A-8	IC1391	G-4
D1101	F-11	IC1501	B-6
D1201	C-20	IC1502	D-5
D1202	B-23	IC1901	B-3
D1204	K-4	IC2101	D-27
D1205	J-4		
D1206	F-3	Q1	G-16
D1251	C-22	Q2	G-16
D1301	I-7	Q3	G-15
D1309	I-7	Q4	G-15
D1310	I-7	Q5	I-16
D1311	K-9	Q6	I-13
D1312	J-9	Q7	I-13
D1321	K-9	Q8	K-11
D1322	K-9	Q9	K-13
D1323	J-9	Q10	K-11
D1331	I-7	Q11	L-12
D1332	I-7	Q701	E-16
D1333	I-7	Q801	E-15
D1334	I-7	Q901	A-10
D1341	F-4	Q902	C-9
D1361	E-5	Q903	C-10
D1362	F-5	Q904	B-10
D1364	D-9	Q905	C-8
D1365	E-13	Q906	C-9
D1366	E-3	Q909	E-14
D1367	E-3	Q1001	H-8
D1381	H-4	Q1002	H-8
D1382	H-4	Q1101	E-9
D1391	H-4	Q1131	G-7
D1701	D-6	Q1151	L-9
D1702	D-6	Q1181	G-7
D1851	C-4	Q1201	C-19
D1852	C-3	Q1204	K-1
D1853	C-4	Q1205	K-3
D1901	B-3	Q1206	K-3
D2101	B-27	Q1251	C-22
D2102	C-27	Q1301	J-9
D2103	C-27	Q1302	J-9
		Q1303	K-9
IC1	G-16	Q1321	J-9
IC2	G-15	Q1361	E-3
IC3	G-14	Q1362	D-3
IC51	J-15	Q1363	E-4
IC903	C-15	Q1364	D-3
IC904	D-13	Q1851	C-4
IC905	B-13	Q2101	D-28
IC906	C-11	Q2102	C-28
IC1001	K-11	Q2151	D-26
IC1002	G-10	Q2152	C-26
IC1101	L-10		

5-4. SCHEMATIC DIAGRAM — MAIN SECTION —

- **See page 17 for IC Block Diagrams. (IC1002, 1101, 1131, 1202, 1351, 1901)**
- **See page 48 for IC Pin Functions. (IC1501)**




TUNER SECTION (Page 32) (Page 33)
(AEP, IT, G MODEL)
(EXCEPT AEP, IT, G MODEL)
BT.IN
CLK
BT.OUT
LATCH
STEREO
TUNED
MUTING
PANEL BOARD (Page 43)
CN601
SD.OUT
SD.IN
SCK.IN
RDY
REQ.MG
RESET
REQ.GM
B.GND
B.5V
VF
VFBP (-25V)
VF
+7.5V
CN1501
13P
R1859
(AEP MODEL) 22k
(IT, G, E, MX, AR, AUS, PX MODEL) 10k
R1559
(AEP, IT, G MODEL) 10k
(E, MX, AR MODEL) 22k
(AUS, PX MODEL) 15k
TEST LAND
IC1501
IC1501
TMP87CP64F
MASTER CONTROL
IC1502
INVERTER
IC1131
VOLUME
IC1131
TC9210P
IC1101
GRAPHIC EQUALIZER
IC1101 M62423FP
Q1151
BBFB SWITCH
Q1101
BBFB SWITCH
Q1131, 1181
MUTING
C1131, 1181
(AEP, IT, G MODEL) 10 50V
(E, MX, AR, AUS, PX MODEL) 0.47 50V
C1204, 1254
(AEP, IT, G MODEL) 47/10V
(EXCEPT AEP, IT, G MODEL) 22/50V
*1 R1204, 1254 (AEP, G, IT (E, MX, AR,
*2 R1203, 1253 (AEP, G, IT (E, MX, AR,
IC1201
STK4132 (AEP, IT, G MODEL)
STK4152 (E, MX, AR, AUS, PX MODEL)
POWER AMP
【POWER AMP BOARD】
IC1202
μPC1237HA
PORTECTOR
Q1204
BN1F4M
OVER LOAD
DET
Q1205
1N4148M
Q1206
BA1A4M
INVERTER
POW ON
POW-OFF
IC1351
REG
IC1351 LA5617
Q1361-1364
SWITCH REG
Q1001, 1002
FUNCTION SWITCH
POWER SOURCE
AEP2, E, MX MODEL
CN1371
CN-PS
R1371 10k
C1371 47/16V
IC1381
TC +10V REG
(AEP, G, IT MODEL) 35V
(E, MX, AR, AUS, PX MODEL) 50V
EXCEPT AEP, G, IT MODEL
(AEP, G, IT MODEL (E, MX, AR, AUS, PX
AEP, IT, G MODEL
+5.6V
+7.5V
-7.5V
-25V
-32V
16V
LAND
MICOM+6V
RST
EN
(REC_OUT_RCH)
(REC_OUT_LCH)
(D.GND)
(ST+12V)
(TC-7.5V)
(CD_A+5V)
(M-GND)
(CD+7.5V)
(MICOM_ACBET)
(MICOM+6V)
(RCH_OUT)
JW-BL
JW-C
JW-BR
(32.768KHz)
4.5Vp-p



NOTE

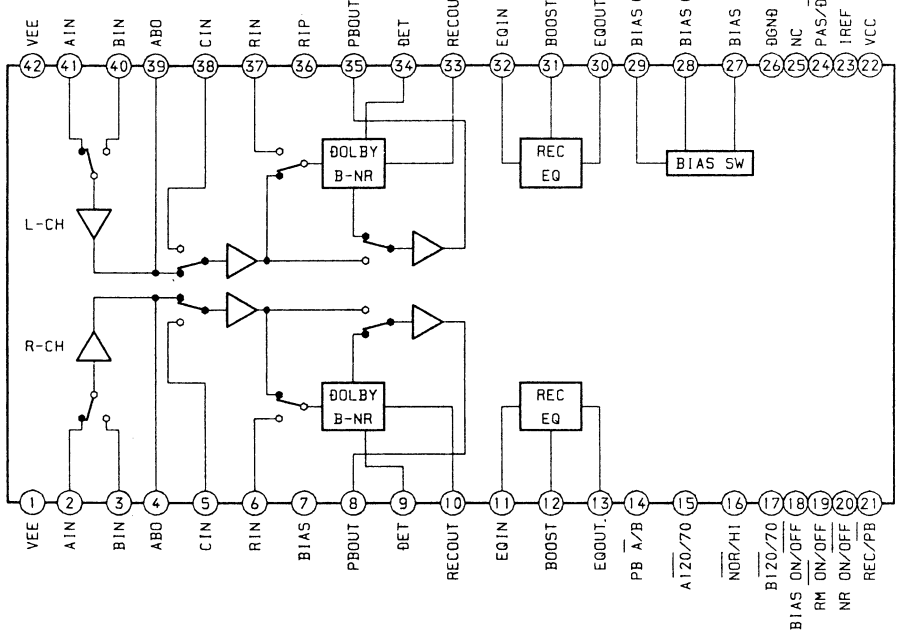
- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- △ :internal component.
- :nonflammable resistor.
- :fusible resistor.
- :panel designation.
- ——— :B+ Line.
- — — — :B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (deturned) conditions.
  no mark: FM
- Voltages are taken with a VOM (Input impedance 10MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

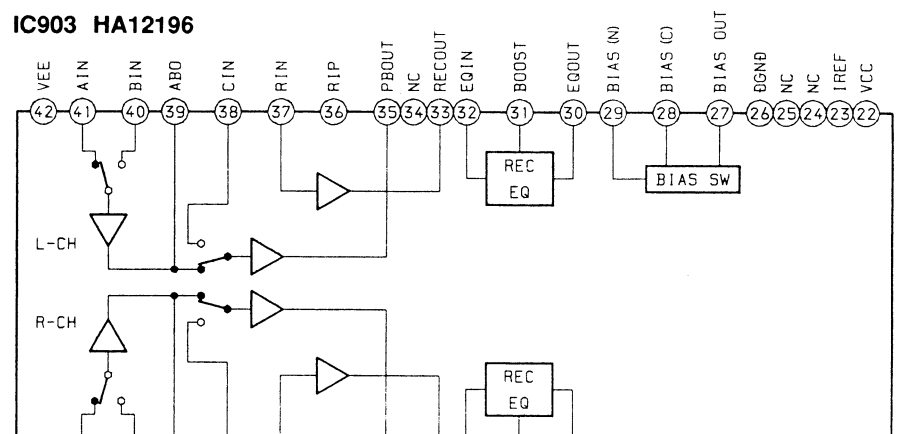
- Signal path.
  - :FM
  - :PB (ΘECK)
  - :REC (ΘECK B)
  - :CD
  - :PHONO
- Abbreviation
  G :German model.
  IT :Italian model.
  MX :Mexican model.
  AUS: Australian model.
  AR :Argentine model.
  AEP2: AEP model with power source for PS-LX56P.

- **IC Block Diagrams.**

IC903 HA12195


VEE AIN BIN ABO CIN RIN RIP PBOUT DET RECOUT EQIN BOOST EQOUT BIAS (N) BIAS (C) BIAS OUT DGNΘ NC PAS/BOL IREF VCC
42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22
DOLBY B-NR
REC EQ
BIAS SW
L-CH
R-CH
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
VEE AIN BIN ABO CIN RIN BIAS PBOUT DET RECOUT EQIN BOOST EQOUT PB A/B A120/70 NOR/HI B120/70 BIAS ON/OFF RM ON/OFF NR ON/OFF REC/PB

IC903 HA12196


VEE AIN BIN ABO CIN RIN RIP PBOUT NC RECOUT EQIN BOOST EQOUT BIAS (N) BIAS (C) BIAS OUT DGNΘ NC NC IREF VCC
42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22
REC EQ
BIAS SW
L-CH
R-CH
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
VEE AIN BIN ABO CIN RIN NC PBOUT NC RECOUT EQIN BOOST EQOUT PB A/B A120/70 NOR/HI B120/70 BIAS ON/OFF RM ON/OFF NC NC

6-5. SCHEMATIC DIAGRAM — DECK SECTION —

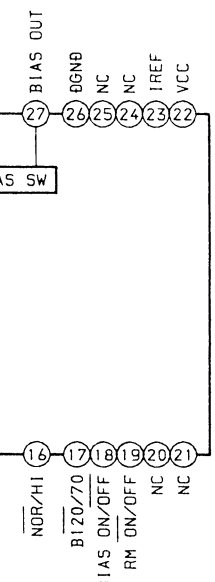
- **Refer to page 19 for Printed Wiring Board (Main Board).**

NOTE

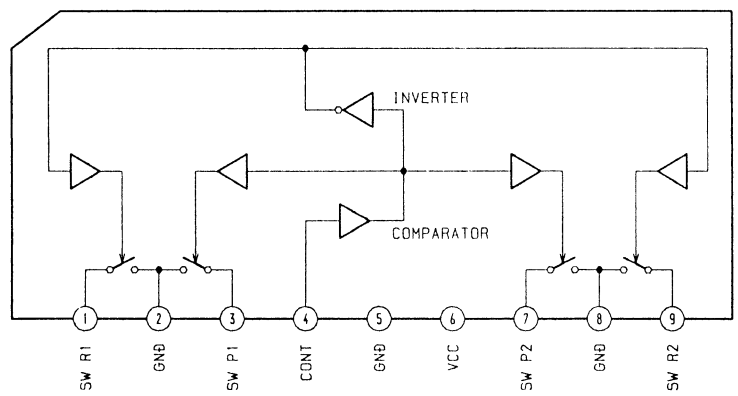
- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

- % :indicates tolerance.
- :nonflammable resistor.
- :panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.



IC906 μPC1330HA



(Page 23)

(Page 23)

- Signal path.
  - :PB (DECK A)
  - :PB (DECK B)
  - :REC (DECK B)

y mark ⚠ or dotted
cal for safety.
ber specified.

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:PLAY
  ( ):REC
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.

- ——— :B+ Line.
- — — — :B- Line.
- ▭ :adjustment for repair.
- Abbreviation
  G :German model.
  IT :Italian model.

6-6. PRINTED WIRING BOARD — DE

• See page 16 for Circuit Boards

【LEAF SW(A) BOARD】

【LEAF SW(B) BOARD】

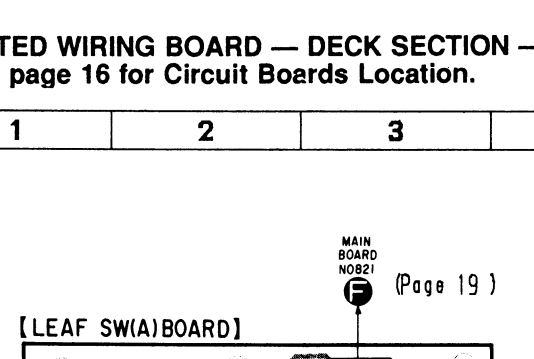
【SW BOARD】

NOTE

- ▒ :Pattern from the side which
- Abbreviation
  G :German model.
  IT :Italian model.

TED WIRING BOARD — DECK SECTION —
e page 16 for Circuit Boards Location.

1	2	3	4



OTE

:Pattern from the side which enable seeing.

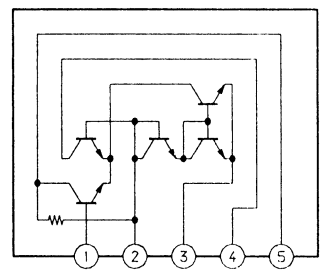
bbreviation

:German model.

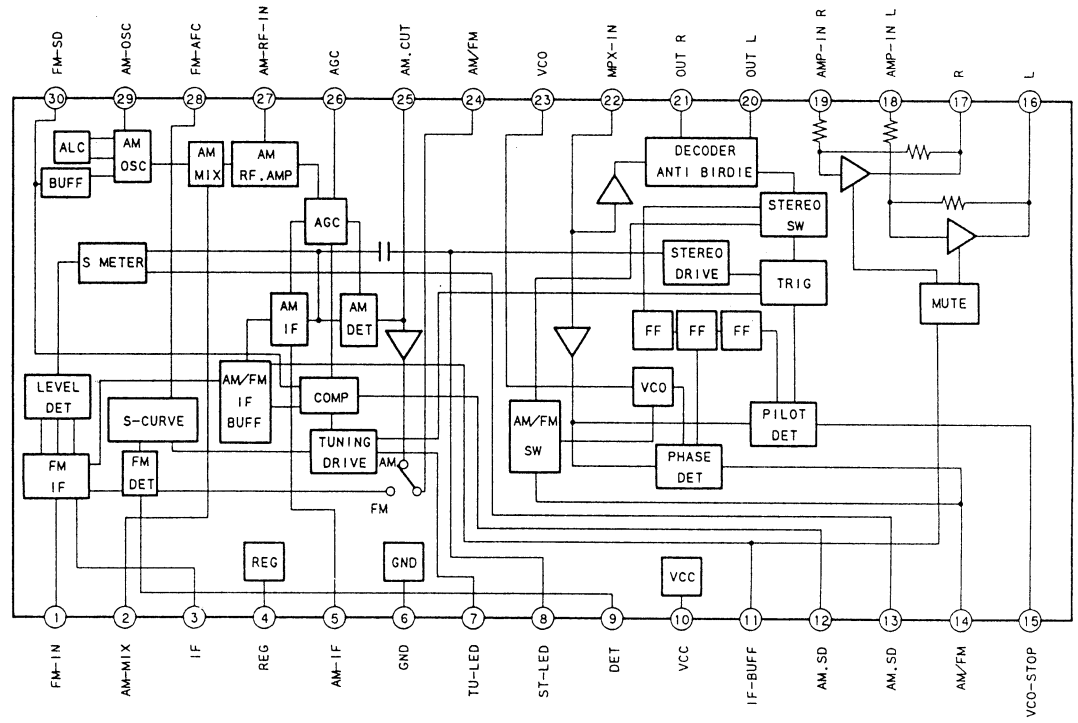
T :Italian model.

• **IC Block Diagrams.**

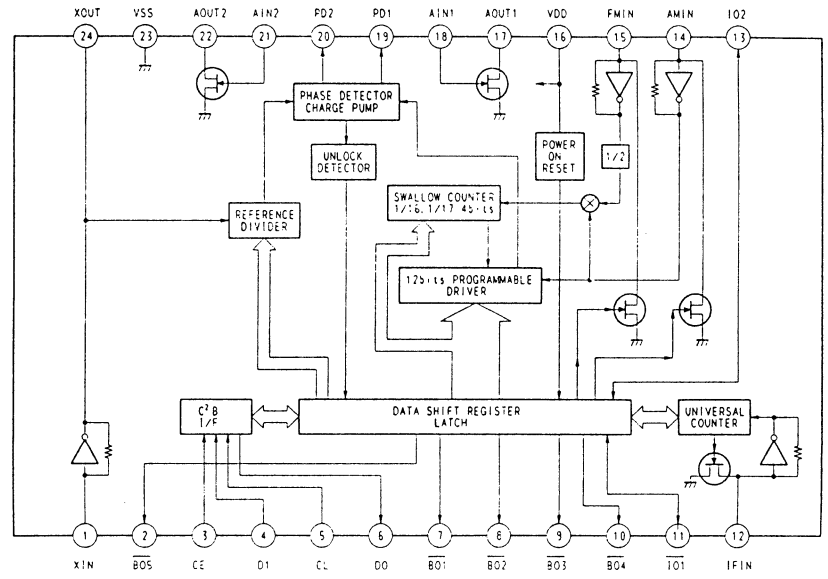
IC1, 2 TA7060AP



IC3 LA1835

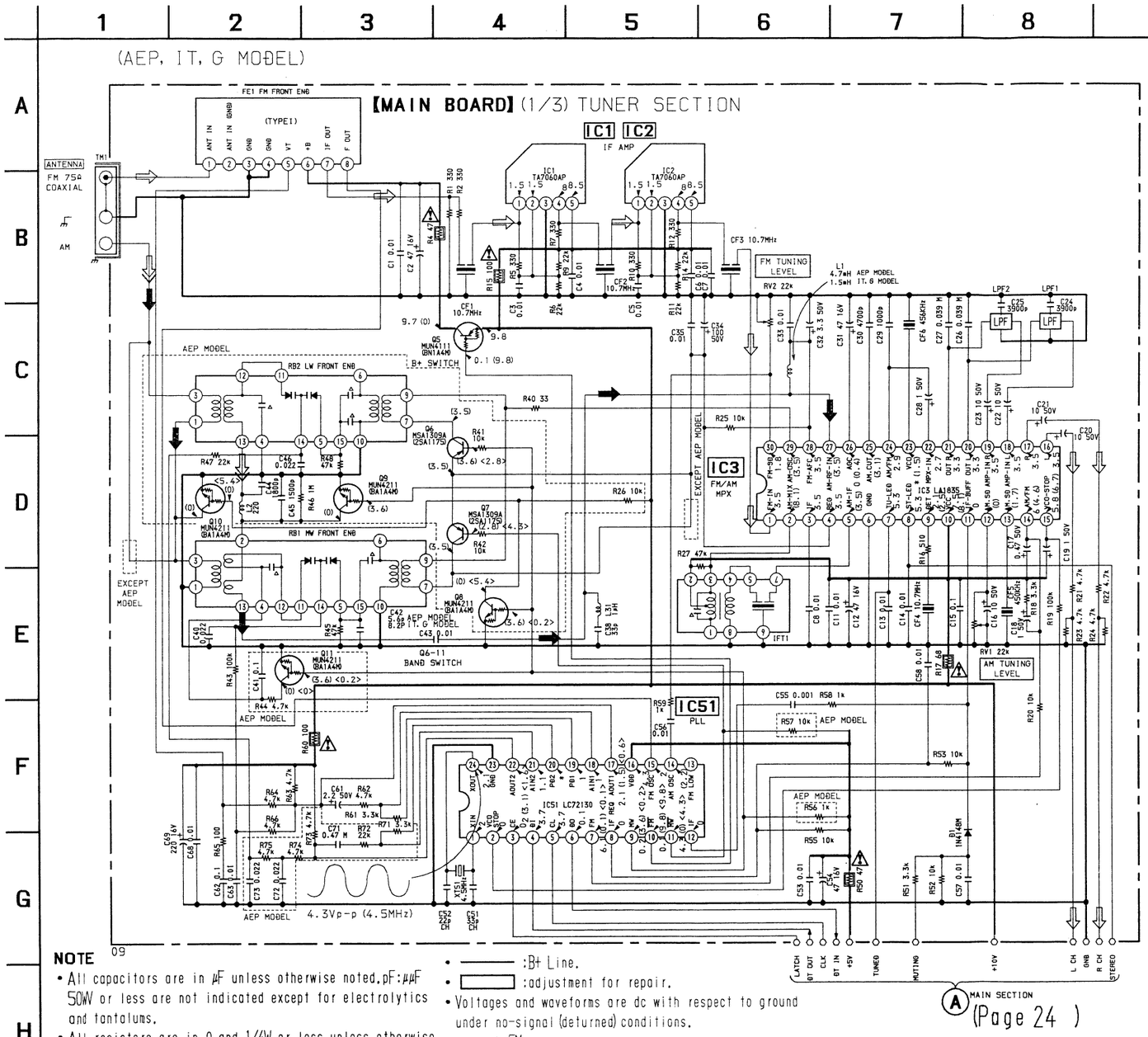


IC51 LC72130



6-7. SCHEMATIC DIAGRAM — TUNER SECTION —

- **Refer to page 19 for Printed Wiring Board (Main Board).**
- **See page 30 for IC Block Diagrams. (IC1,2, 51)**



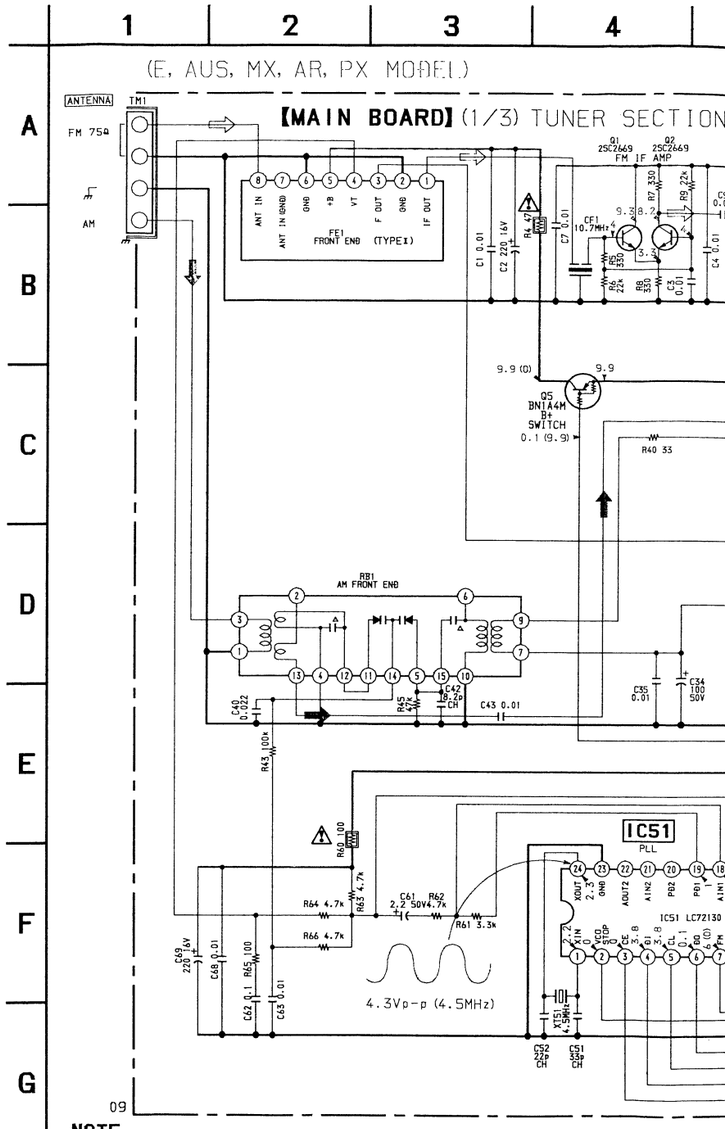
NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % :indicates tolerance.
- △ :internal component.
- :nonflammable resistor.
- :panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

- :B+ Line.
- :adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (deturned) conditions.
  no mark: FM
  ( ): MW
  < >: LW
  * : can not be measured.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.

- Abbreviation
  G : German model.
  IT : Italian model.
- Signal path.
  : FM
  : MW
  : LW

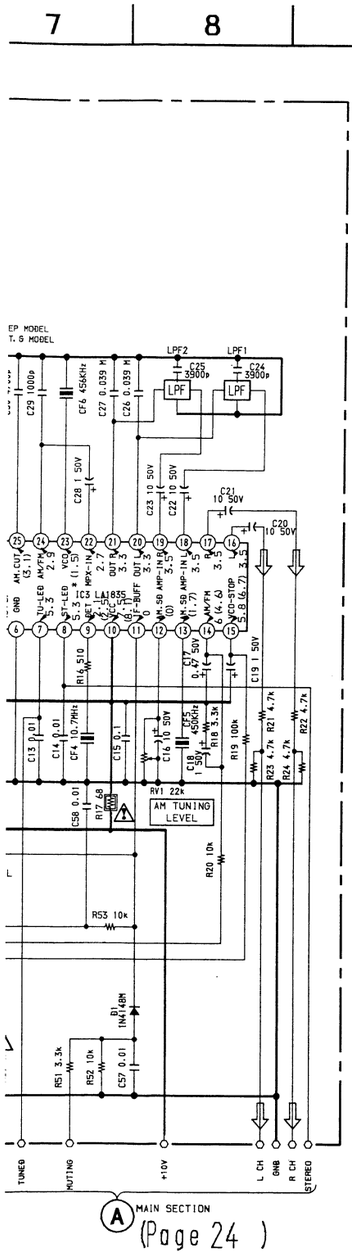


NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % :indicates tolerance.
- △ :internal component.
- :nonflammable resistor.
- :panel designation.
- :B+ Line.
- :adjustment for repair.
- Signal path.
  : FM
  : AM

- Abbreviation
  AUS: Australian model.
  MX : Mexican model.
  AR : Argentine model.

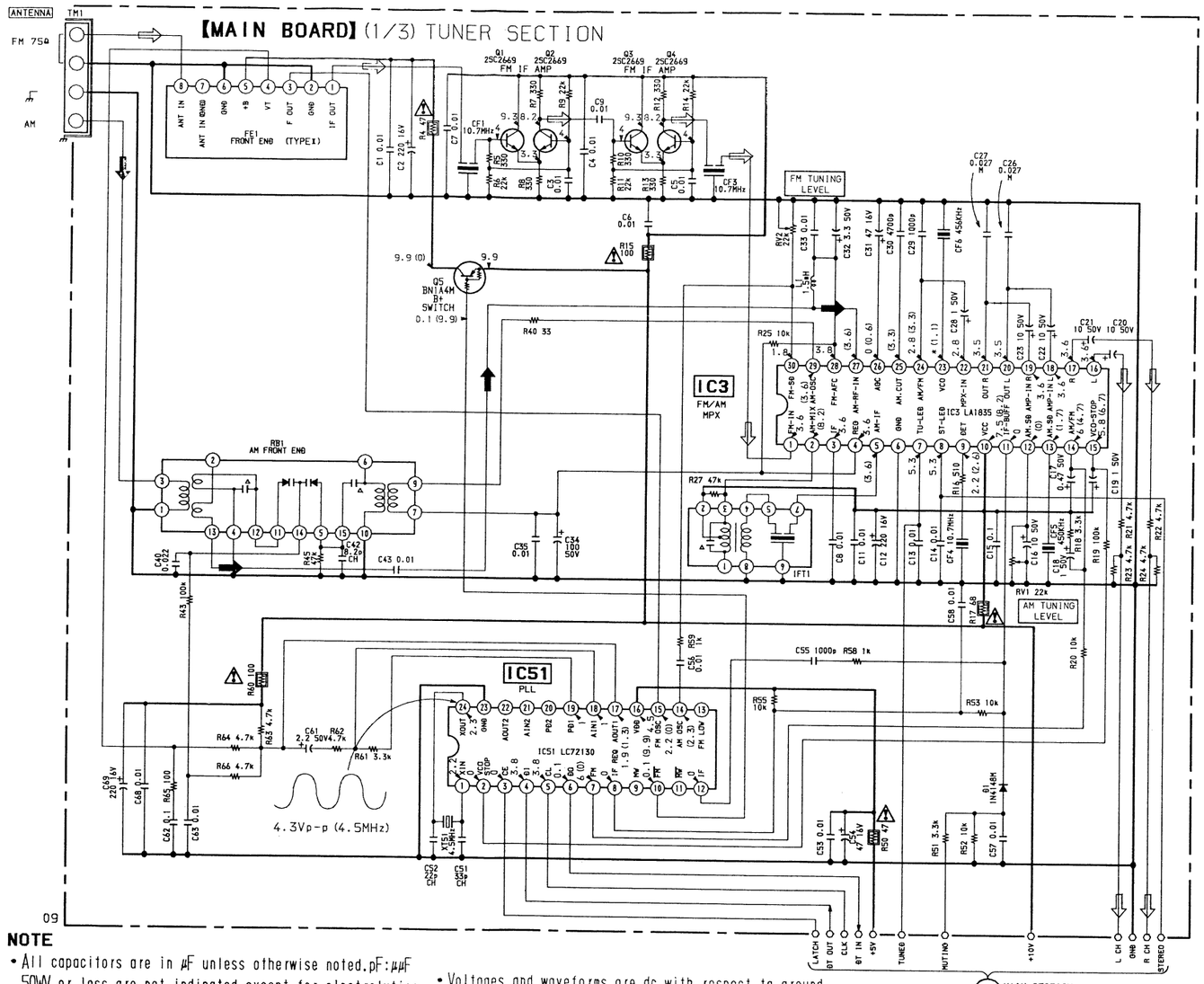
- Voltages and waveforms are under no-signal (detu
  no mark: FM
  ( ): AM
  * : can not be me
- Voltages are taken wi
  Voltage variations ma
  tion tolerances.
- Waveforms are taken w
  Voltage variations ma
  tion tolerances.



eviation
ierman model.
talian model.
l path.
:FM
:MW
> :LW

(E, AUS, MX, AR, PX MODEL)

【MAIN BOARD】(1/3) TUNER SECTION



09

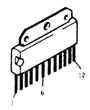
NOTE

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- % :indicates tolerance.
- △ :internal component.
- :nonflammable resistor.
- :panel designation.
- :B+ Line.
- :adjustment for repair.
- Signal path.
  :FM
  :AM
- Abbreviation
  AUS: Australian model.
  MX : Mexican model.
  AR : Argentine model.
- Voltages and waveforms are dc with respect to ground under no-signal (deturned) conditions.
  no mark: FM
  ( ): AM
  * :can not be measured.
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.

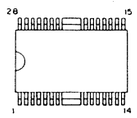
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

6-8. SEMICONDUCTOR LEAD LAYOUTS

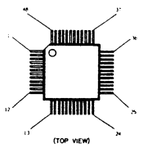
BA6191



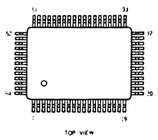
BA6397FP



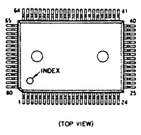
CXA1782BQ



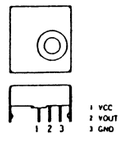
CXD2507AQ



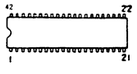
CXP82612-006Q



GP1U57XB

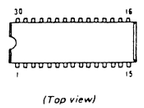


HA12195
HA12196



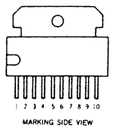
(Top view)

LA1835



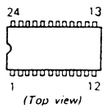
(Top view)

LA5617



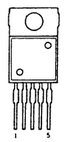
LB1641

LC72130

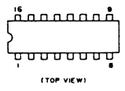


(Top view)

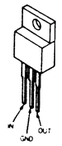
L78MR06
L780S10



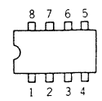
MC14052BCP
TC9210P



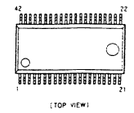
M5F7807



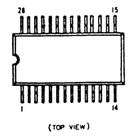
M5218AP
μPC4570C-1



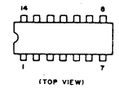
M62423FP



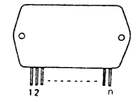
PCM1710U



SN74HCU04AN

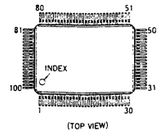


STK-4132MK2
STK-4152MK2



TA7060AP

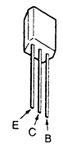
TMP87CP64F-6254



μPC1237HA

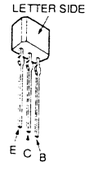
μPC1330HA

DTA124ES
DTA144ES
DTC114ES
DTC144ES
2SC2669-OY

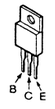


MSB710
UN2111
UN2211

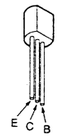
UN4111
2SA1175-HFE
2SC2785-HFE



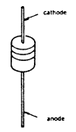
2SB1094-LK
2SD2012



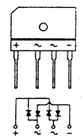
2SC945-P
2SC1841-PAFAEA



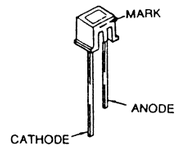
HZS7B2L
UZ-2.7BSA
UZ-4.7BSB
UZ-5.6BSB
UZL-11M1
11EQS04
11ES2



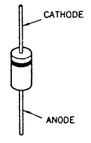
RBA-402



SEL5221S-TH8F
SEL5421E-TH8F
SEL5921A-TH8F



UZ-27BS
1N4148M



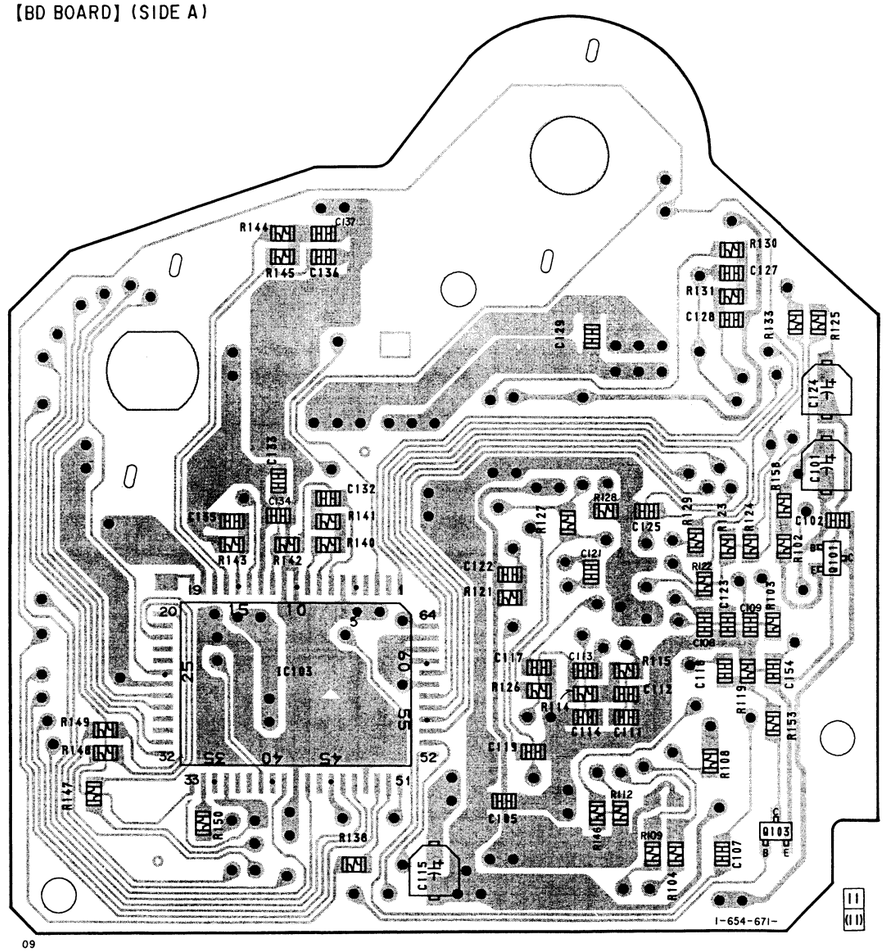
6-9. PRINTED WIRING BOARD — CD SECTION —

• See page 16 for Circuit Boards Location.

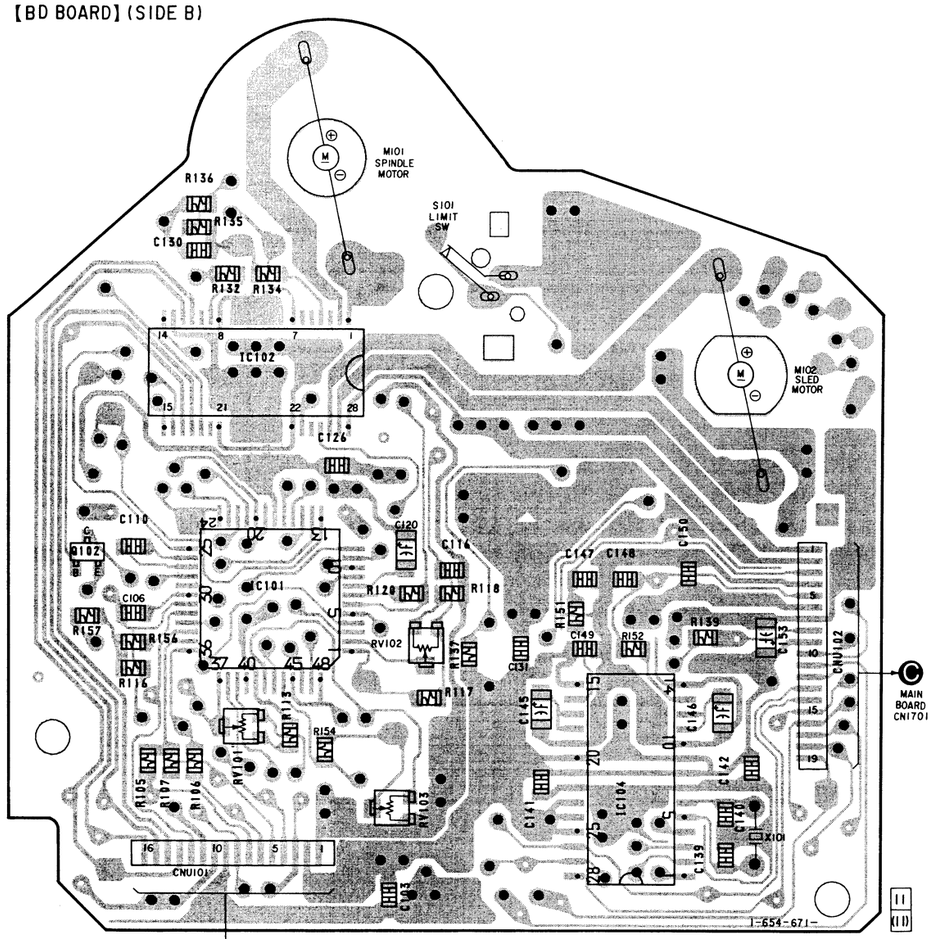
• **Semiconductor Location**

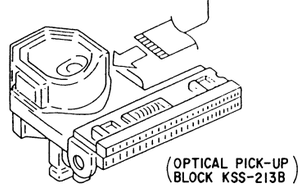
Ref. No.	Location
IC101	D-9
IC102	C-8
IC103	E-3
IC104	F-11
Q101	D-6
Q102	D-7
Q103	F-6

【BD BOARD】(SIDE A)



【BD BOARD】(SIDE B)





(OPTICAL PICK-UP BLOCK KSS-213B)

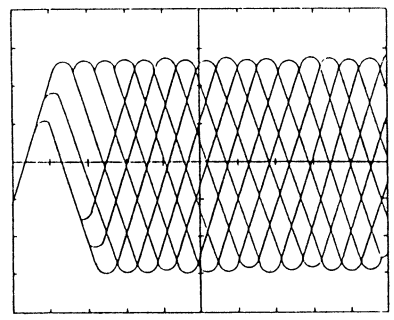
NOTE

- ○—— :parts extracted from the component side.
- ● :Through hole.
- ▒▒ :Pattern from the side which enable seeing. (The other layer's patterns are not indicated.)

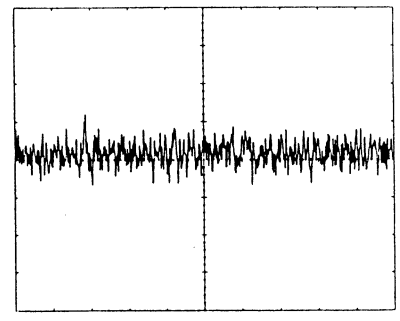
(Page 19)

• **Waveforms.**

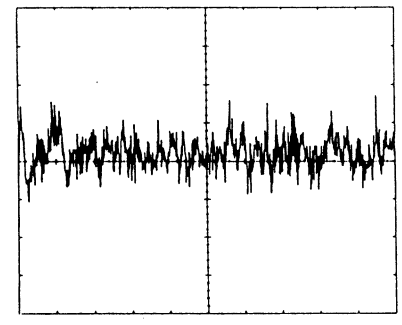
❶ IC101 ㉛ 1.4Vp-p



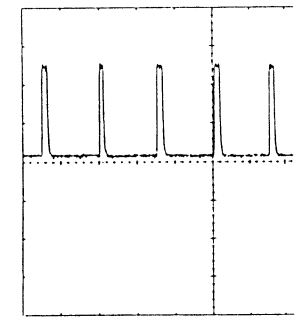
❷ IC101 ㊹ 8mVp-p 0.2ms/DIV



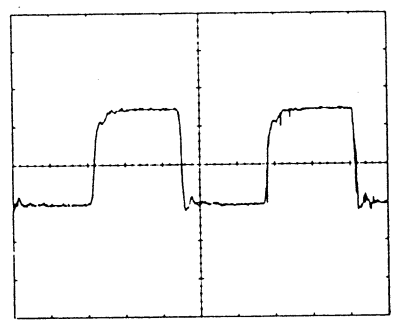
❸ IC101 ② 20mVp-p 2ms/DIV



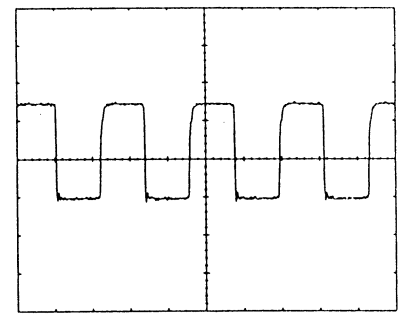
❹ IC103 ③ 2.4Vp-p 7.



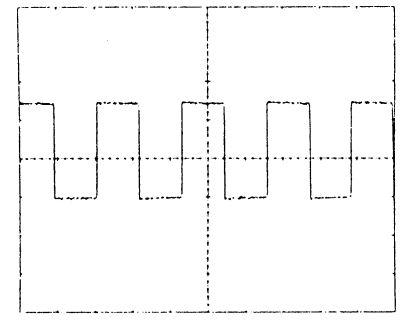
❻ IC103 ㉕ 5.1Vp-p 232.7µsec



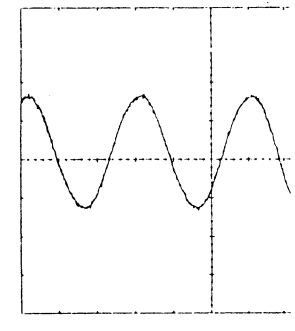
❼ IC103 ㉒ 5.1Vp-p 472.7µsec



❽ IC103 ⑳ 5.1Vp-p 23µsec



❾ IC104 ⑤ 3Vp-p 16.



6-10. SCHEMATIC DIAGRAM — CD SECTION —

NOTE

- All capacitors are in µF unless othe
  50WV or less are not indicated excep
  and tantalums.
- All resistors are in Ω and 1/4W or l
  specified.

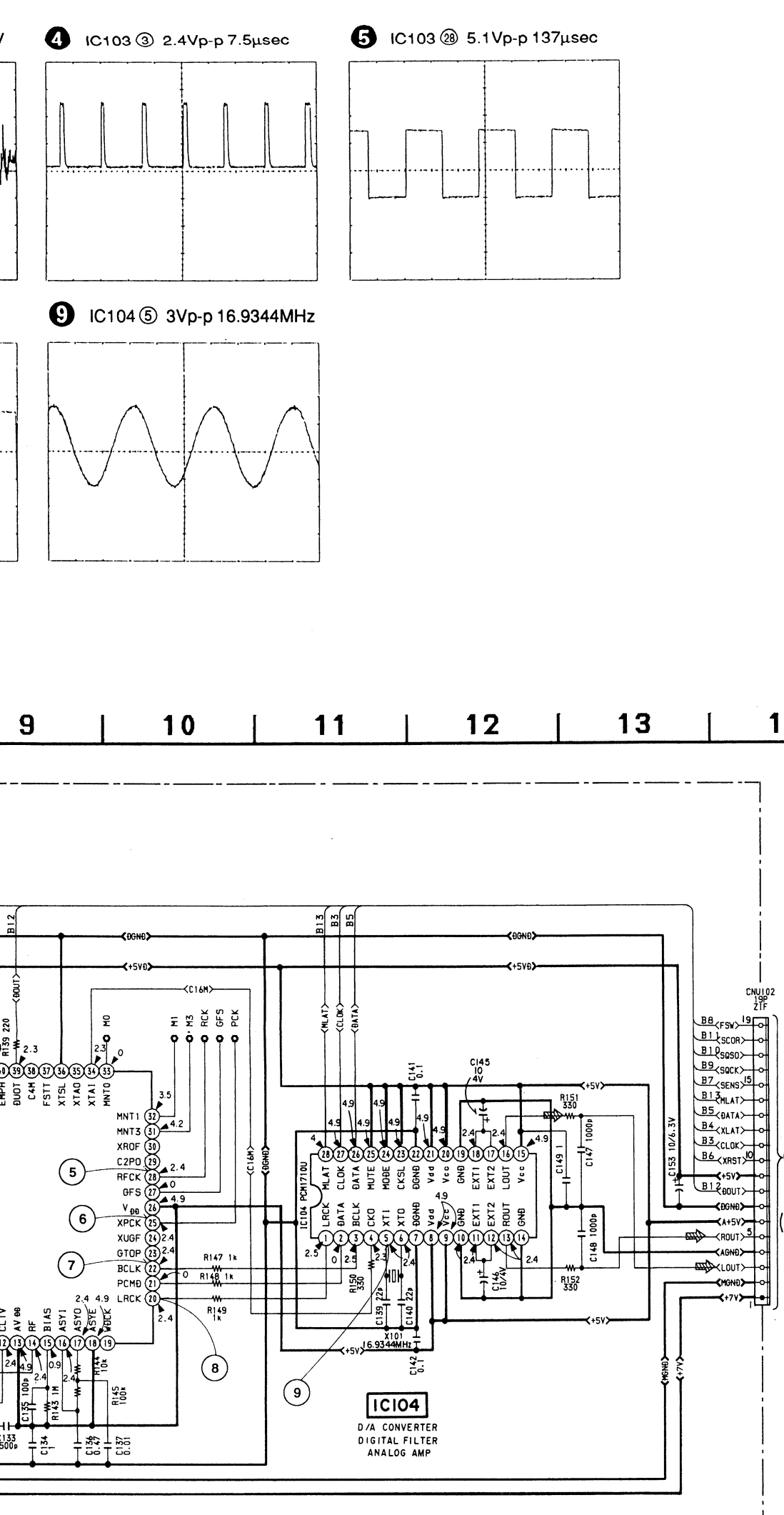
Note: The components identified by ma
line with mark ⚠ are critical
Replace only with part number sp

4 IC103 ③ 2.4Vp-p 7.5µsec

5 IC103 ㉘ 5.1Vp-p 137µsec

9 IC104 ⑤ 3Vp-p 16.9344MHz

9 | 10 | 11 | 12 | 13 | 14 | 15


IC104 PCM1710U
MLAT CLOK DATA MUTE MODE CKSL DGND Vdd Vcc GND EXT1 EXT2 LOUT ROUT GND
LRCK DATA BCLK CKO XTI XTO DGND Vdd Vcc GND EXT1 EXT2 ROUT GND
X101 16.9344MHz
CNU102 19P ZIF
MAIN BOARD CN1701
(Page 23)
IC104
D/A CONVERTER
DIGITAL FILTER
ANALOG AMP

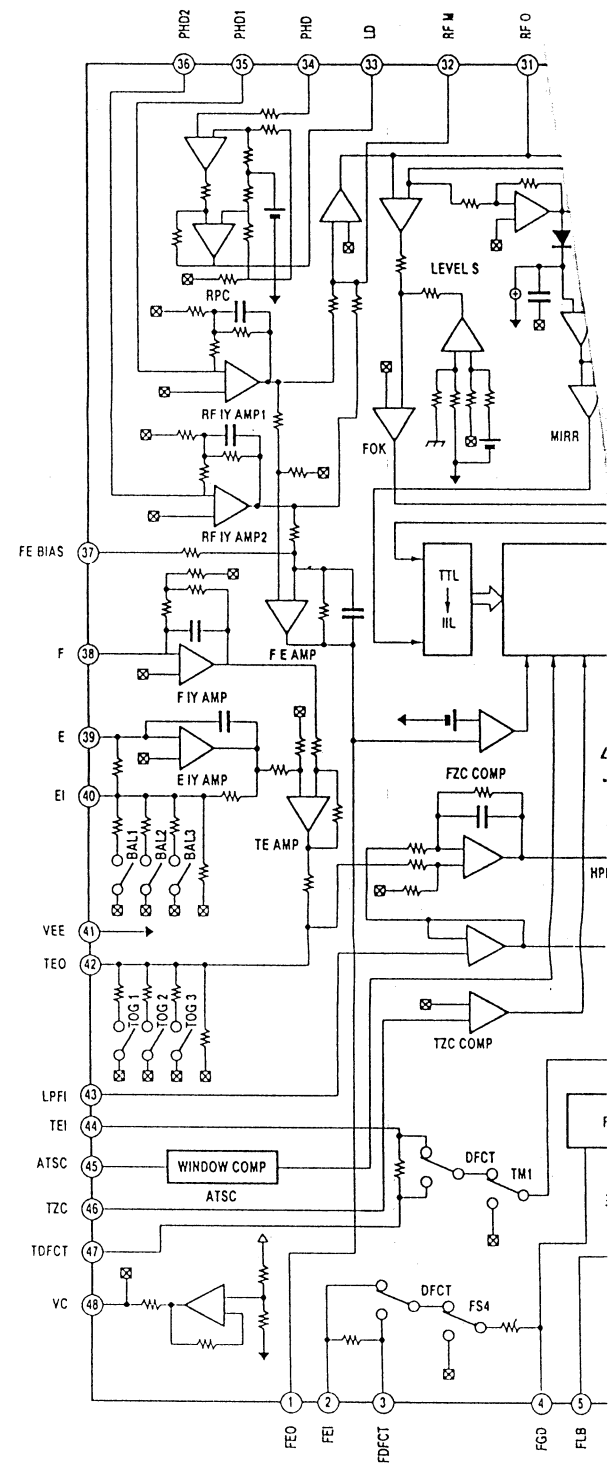
ors are in µF unless otherwise noted. pF: µµF
ss are not indicated except for electrolytics
ms.
rs are in Ω and 1/4W or less unless otherwise

mponents identified by mark ⚠ or dotted
ith mark ⚠ are critical for safety.
e only with part number specified.

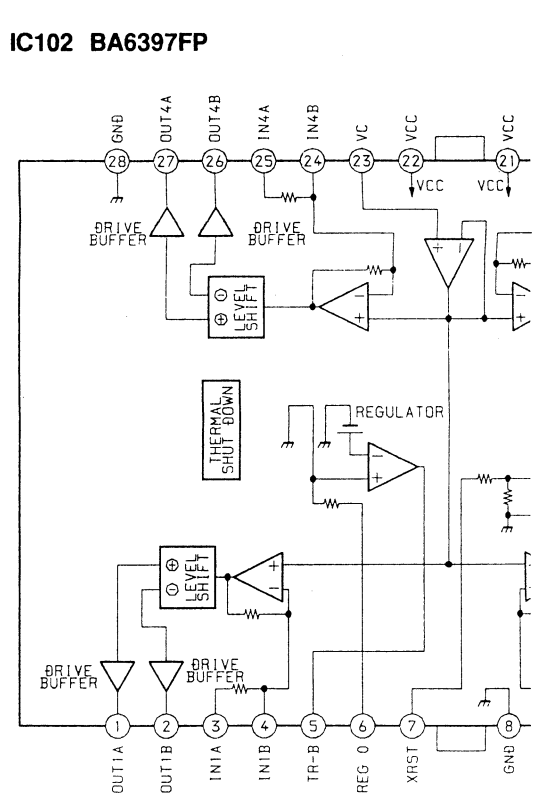
- ——— :B+ Line.
- — — — :B- Line.
- ▭ :adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: STOP (CD)
- Voltages are taken with a VOM (Input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

• **IC Block Diagrams.**

IC101 CXA1782BQ

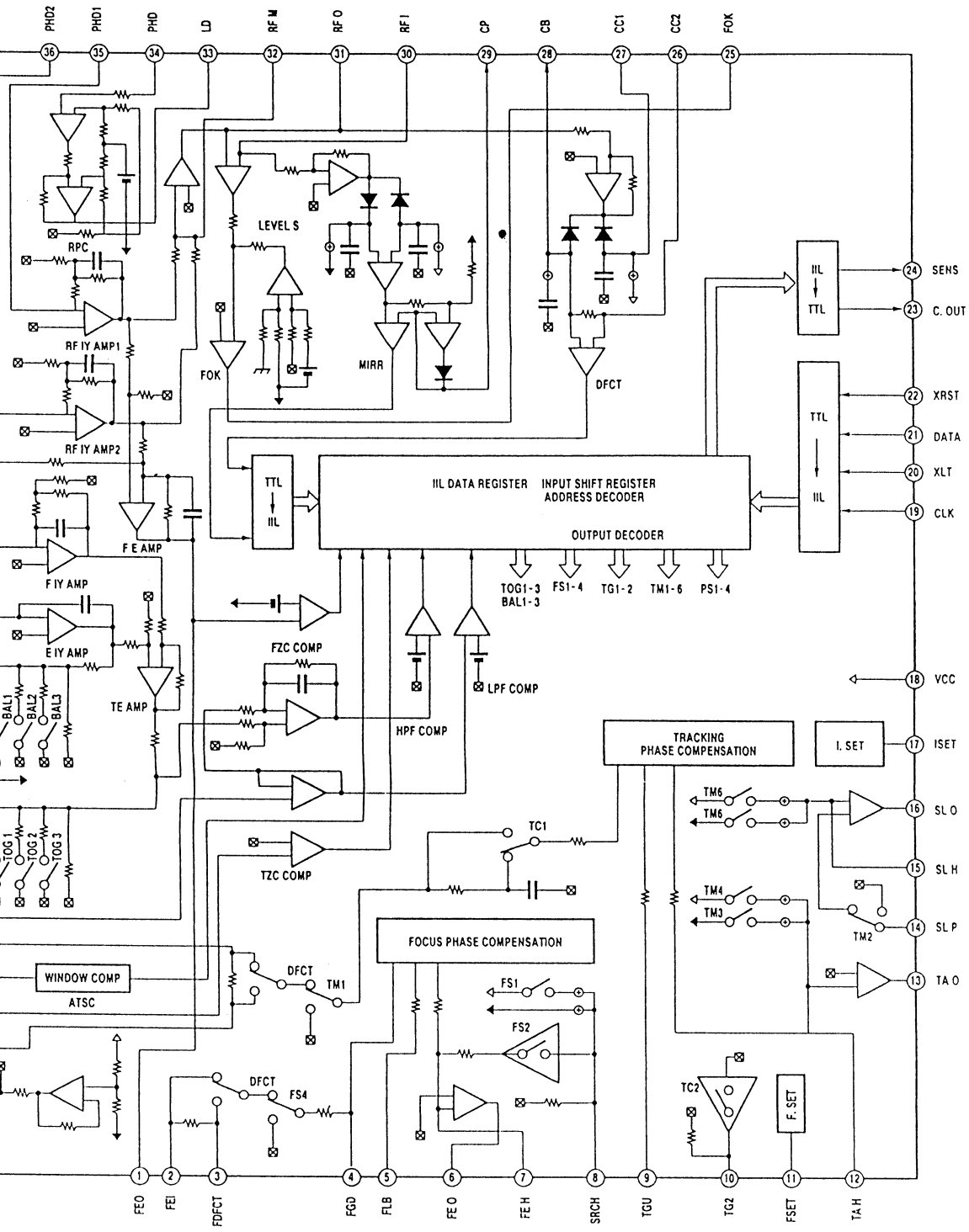


IC102 BA6397FP

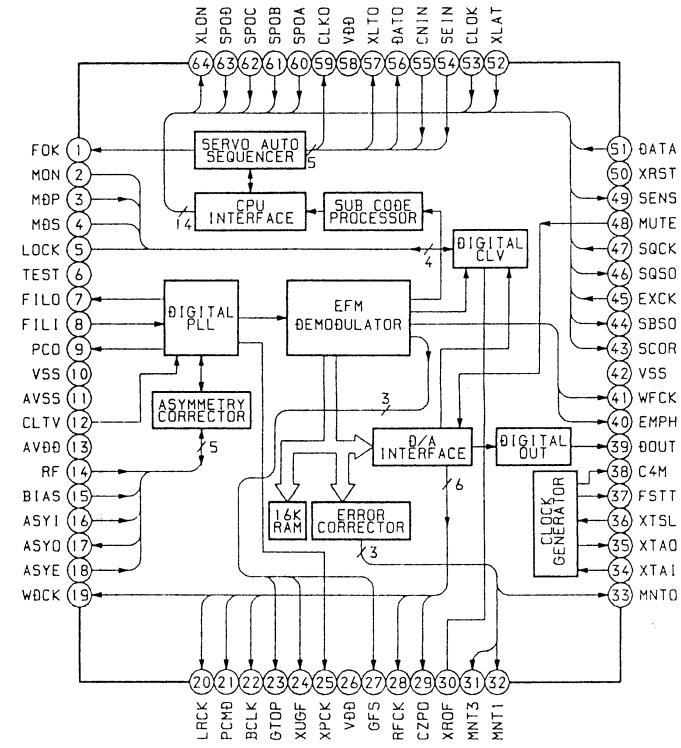


Block Diagrams.

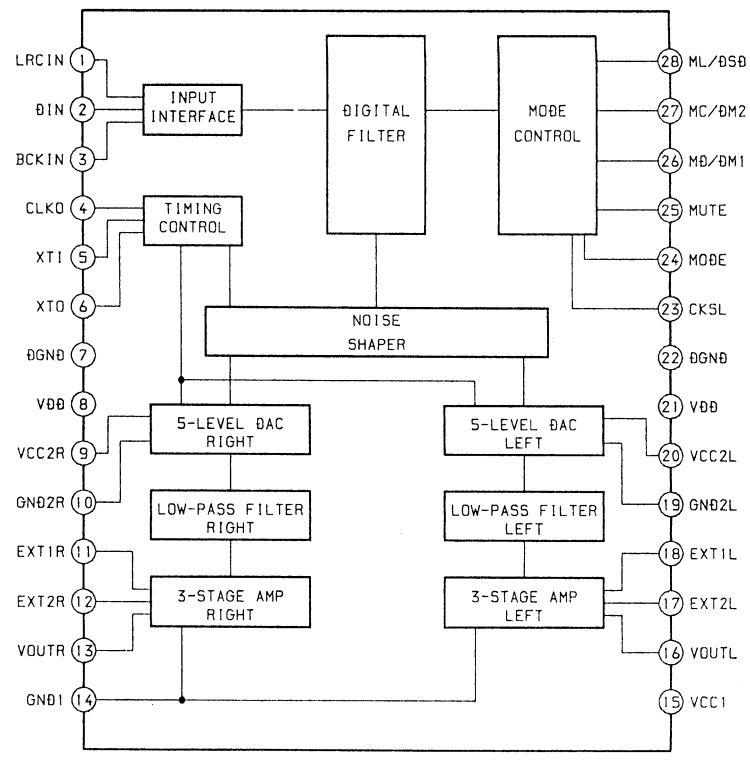
I CXA1782BQ



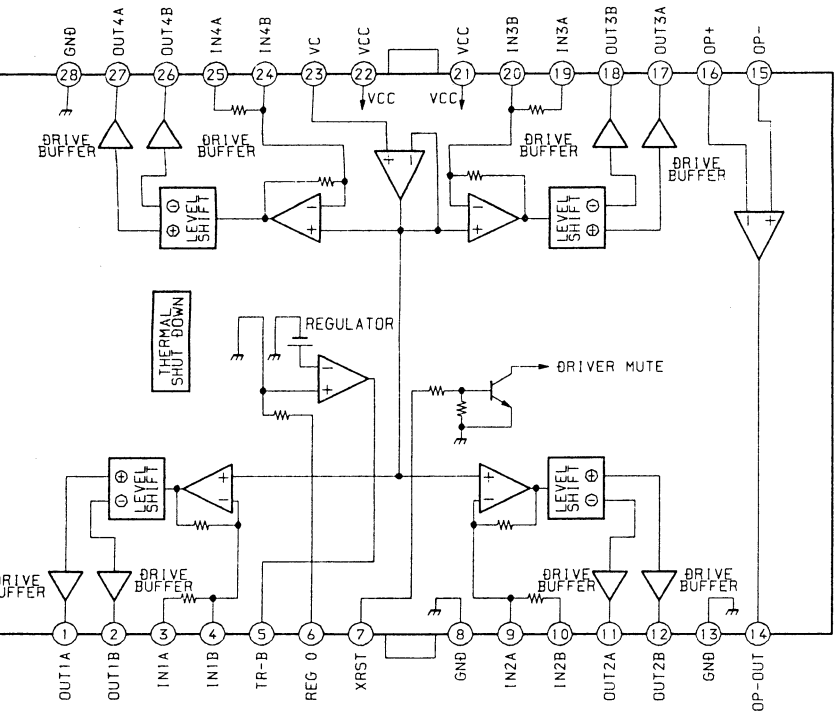
IC103 CXD2507



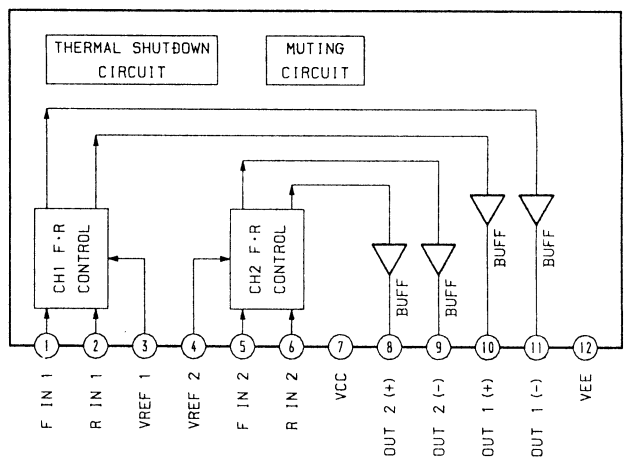
IC104 PCM1710U



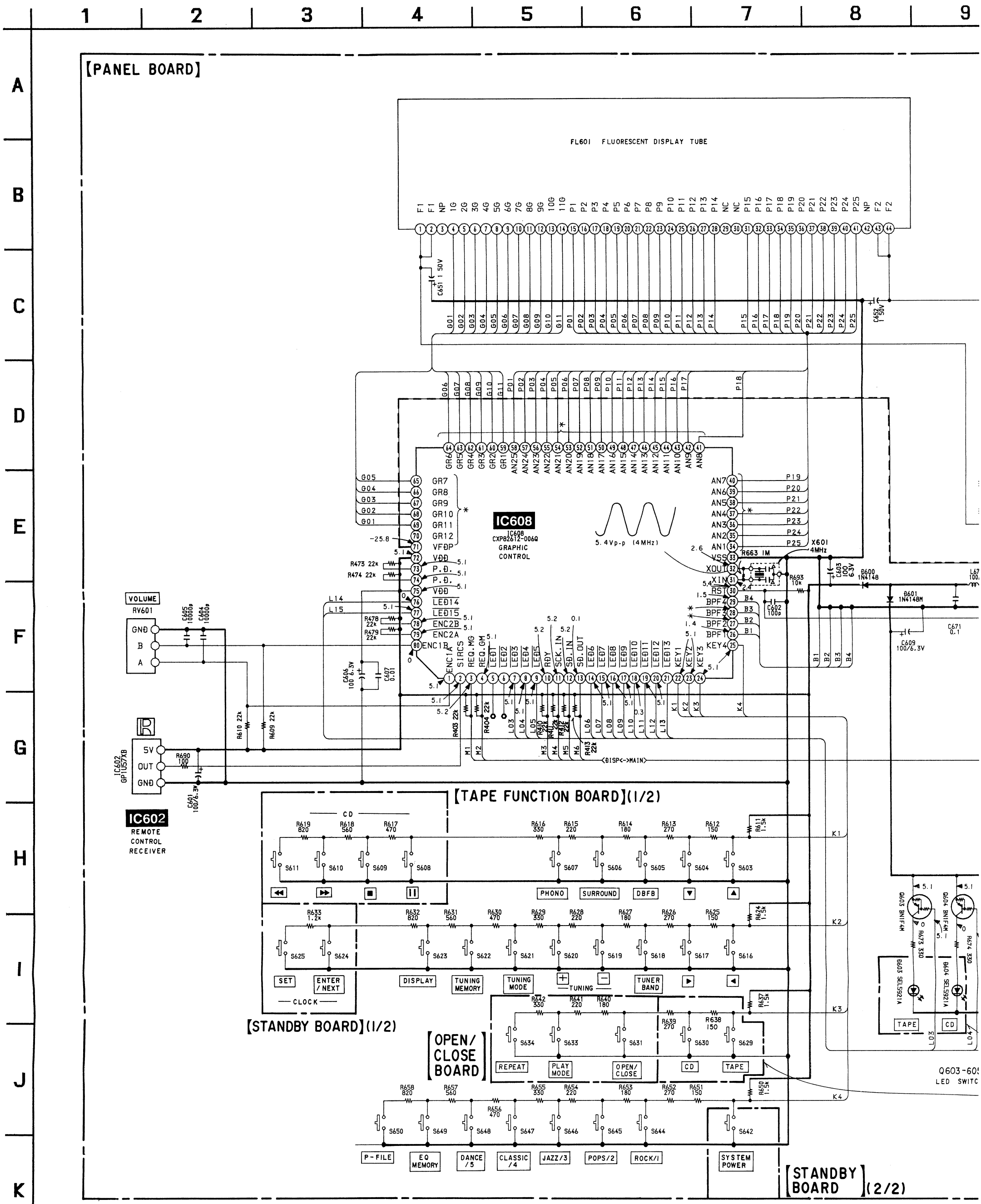
02 BA6397FP



IC301 BA6191



6-11. SCHEMATIC DIAGRAM — PANEL SECTION —



NOTE

- All capacitors are in μF unless otherwise 50WV or less are not indicated except for and tantalums.
- All resistors are in Ω and 1/4W or less u specified.
- △ :internal component.
- ▭ :panel designation.
- ——— :B+ Line.
- — — — :B- Line.
- Voltages and waveforms are dc with respec under no-signal (deturned) conditions.
  no mark:FM
  * :can not be measured.
- Voltages are taken with a VOM (Input impec Voltage variations may be noted due to n tion tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to n tion tolerances.

(Page 24)

P20 P21 P22 P23 P24 P25 NP F2 F2

36 37 38 39 40 41 42 43 44

C452 1 50V

P21 P22 P23 P24 P25

X601 4MHz

C603 100 6.3V

Ð600 1N4148

L671 100μH

Ð601 1N4148M

C671 0.1

C609 100/6.3V

R692 100

B1 B2 B3 B4

R687 100

R689 2.2k

R688 100

Ð629 UZ-2.7BSA

Ð630 UZ-2.7BSA

L672 100μH

C675 220 35V

VF
VF
VFÐP (-25V)
5V
Ð.GNÐ
RESET
REQ.MG
REQ.GM
RÐY
SCK.IN
SÐ.IN
SÐ.OUT

M1 M2 M3 M4 M5 M6

R664 100
R665 100
R666 100
R667 100
R668 100
R669 100

CN601 FFC-13P

13	+7V
12	VF
11	VFÐP (-25V)
10	VF
9	5V
8	Ð.GNÐ
7	REQ.GM
6	RESET
5	REQ.MG
4	RÐY
3	SCK.IN
2	SÐ.IN
1	SÐ.OUT

Ⓓ MAIN BOARD CN1501

K1 K2 K3 K4

CLASSIC/4 POPS/2 DANCE/5 JAZZ/3 ROCK/1 (CD) (CD)

Q603 BN1F4M Q604 BN1F4M Q605 BN1F4M

R673 330 R674 330 R675 330

B603 SEL5921A B604 SEL5921A B605 SEL5221S

R676 330

B606 SEL5221S B607 SEL5221S B608 SEL5221S B609 SEL5221S B610 SEL5221S

B611 SEL5921A B612 SEL5421E

R677 330 R678 330

Q614 BN1F4M Q615 BN1F4M

R680 330 R681 330

B614 SEL5921A B615 SEL5921A

TAPE CD P-FILE TUNER /BAND PHONO

L03 L04 L05 L06 L07 L08 L09 L10 L11 L12 L14 L15

Q603-605 LED SWITCH

Q614,615 LED SWITCH

[TAPE FUNCTION BOARD] (2/2)

TANDBY OARD](2/2)

5 | 16 | 17

re in μF unless otherwise noted. pF: μμF
not indicated except for electrolytics

e in Ω and 1/4W or less unless otherwise

nal component.
designation.
ne.
ne.
eforms are dc with respect to ground
deturned) conditions.

be measured,
en with a VOM (Input impedance 10MΩ).
ns may be noted due to normal produc-
ken with a oscilloscope.
ns may be noted due to normal produc-

Page 24)

- **IC Pin Functions.**

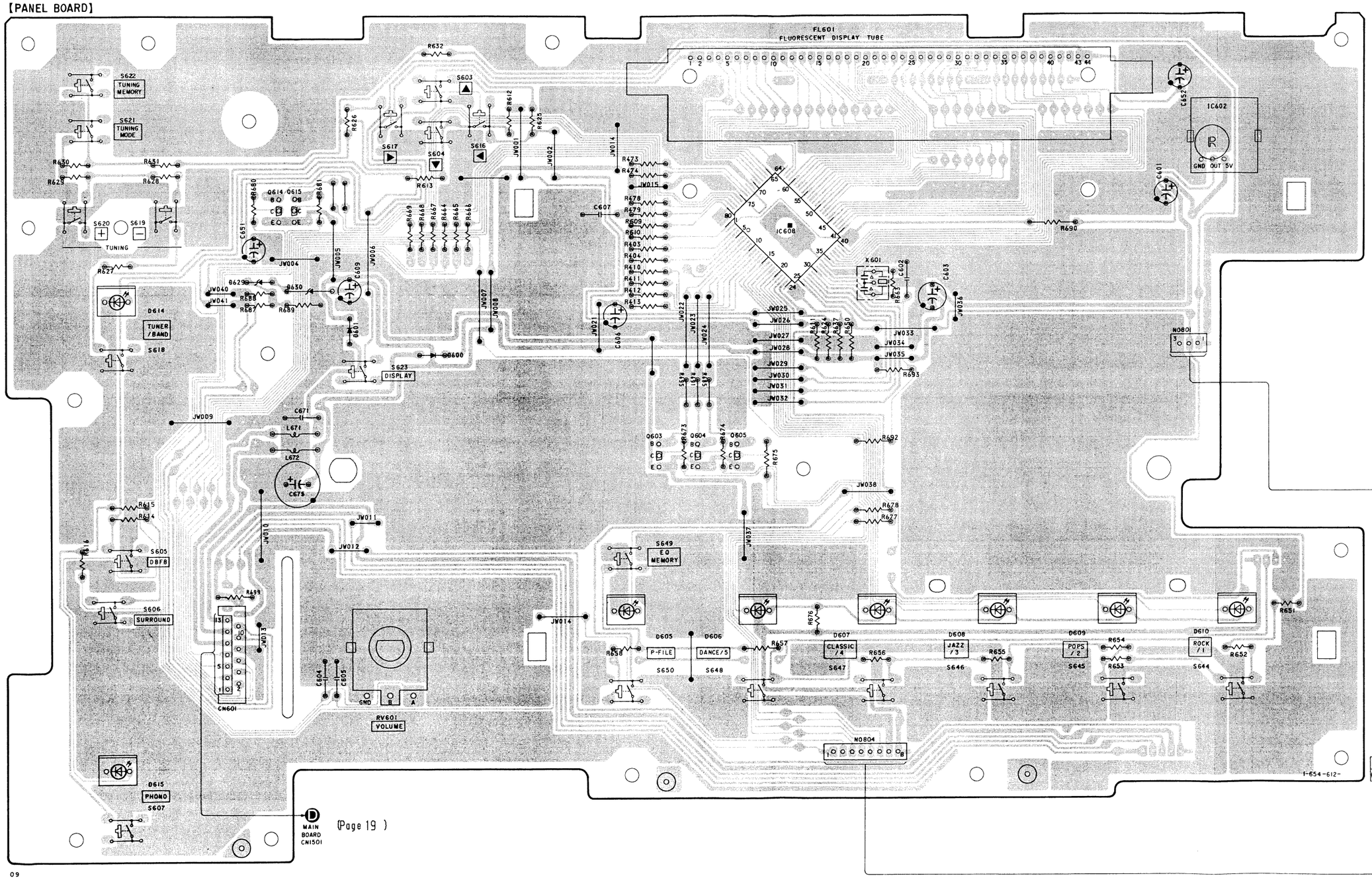
- **IC608 GRAPHIC CONTROL (CXP82612-006Q) IC PIN FUNCTIONS**

Pin No.	Pin Name	I/O	Function
1	ENC1A	I	Volume encoder signal input.
2	SIRCS	I	SIRCS signal input.
3	REQ. MG	I	Reguest signal from master control.
4	REQ. GM	O	Reguest signal to master control.
5, 6	$\overline{\text{LED1, 2}}$	O	LED drive signal output. (Not used.)
7–9	$\overline{\text{LED3–5}}$	O	LED drive signal output.
10	RDY	I/O	RDY signal from/to master control.
11	SCK IN	I	Serial clock input.
12	SD IN	I	Serial data input.
13	SD OUT	O	Serial data output.
14–21	$\overline{\text{LED6–13}}$	O	LED drive signal output.
22–25	KEY1–4	I	Key matrix input.
26–29	BPF1–4	I	Spectram analizer signal input.
30	$\overline{\text{RST}}$	I	Reset signal input.
31	X IN	I	X'tal (4MHz).
32	X OUT	O	
33	Vss	–	GND
34–58	AN1–25	O	FL segment signal output.
59–69	GR1–11	O	FL grid signal output.
70	GR12	O	FL grid signal output. (Not used)
71	VFDP	–	–25V for FL
72	V_{DD}	–	+5V
73, 74	PD	I	Not used. (Pull up)
75	V_{DD}	–	+5V
76, 77	$\overline{\text{LED14, 15}}$	O	LED drive signal output.
78, 79	ENC2B, A	I	Not used. (Pull up)
80	ENC1B	I	Volume encoder signal input.

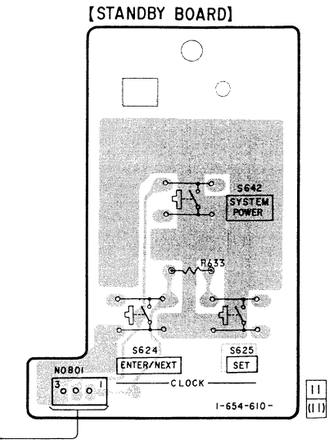
6-12. PRINTED WIRING BOARD — PANEL SECTION —

- See page 16 for Circuit Boards Location.
- See page 34 for Semiconductor Lead Layouts.

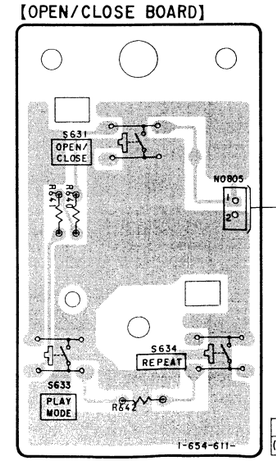
【PANEL BOARD】



【STANDBY BOARD】



【OPEN/CLOSE BOARD】



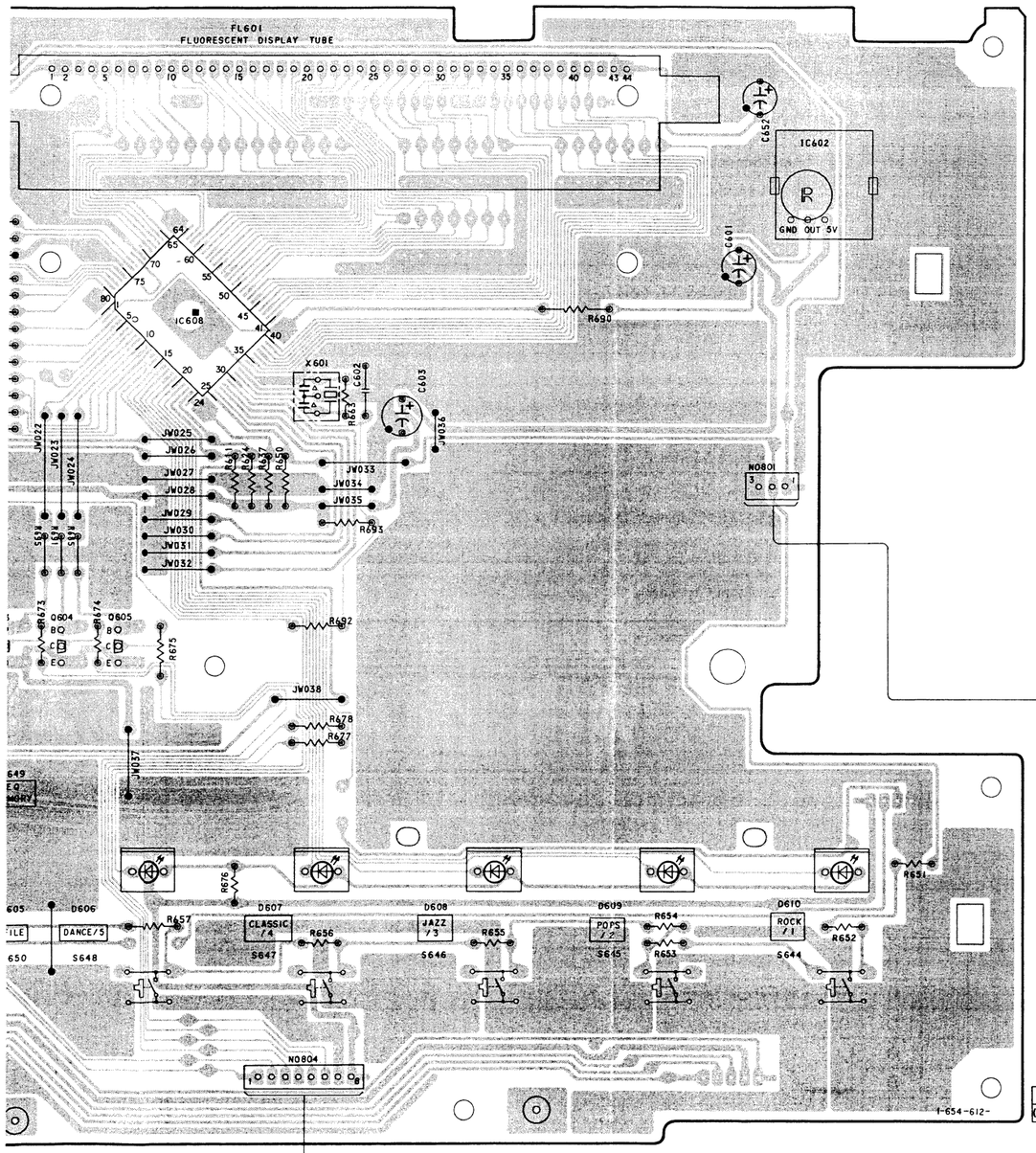
NOTE

- ■ :parts mounted on the conductor si
- △ :internal component.
- :Pattern from the side which enabl

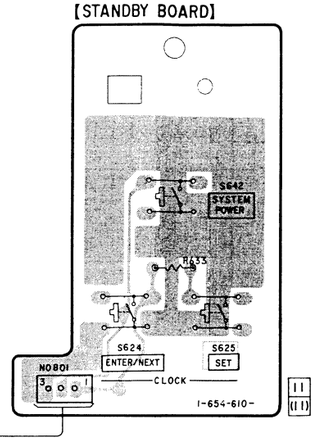
8	9	10	11	12	13	14	15	16	17	18	19	20	21

NOTE

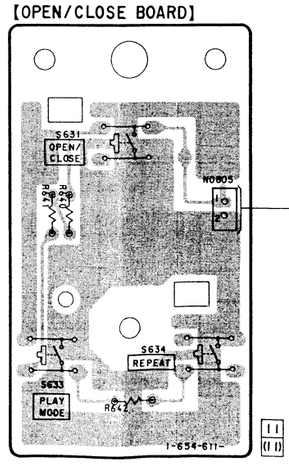
- ■ :parts mounted on the conductor side.
- △ :Internal component.
- ▒ :Pattern from the side which enable seeing.



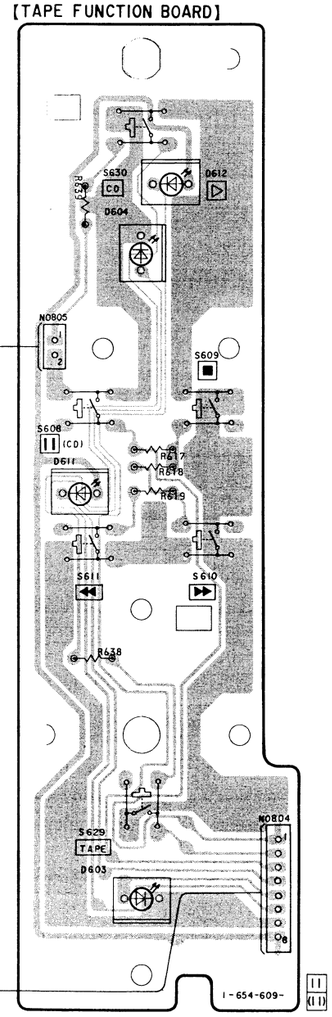
【STANDBY BOARD】



【OPEN/CLOSE BOARD】



【TAPE FUNCTION BOARD】



- **Semiconductor Location**

Ref. No.	Location
D600	D-5
D601	D-4
D603	J-20
D604	E-20
D605	G-7
D606	G-9
D607	G-10
D608	G-11
D609	G-13
D610	G-14
D611	G-20
D612	D-20
D614	D-2
D615	I-2
D629	D-3
D630	D-4
IC602	B-14
IC608	C-9
Q603	F-8
Q604	F-8
Q605	F-9
Q614	C-4
Q615	C-4

Pin No.	Pin Name	I/O	Function
86	TABLE L (5CD)	O	Not used.
87	LOAD OUT	O	Loading motor control signal output.
88	LOAD IN	O	
89	DF LATCH	O	Latch signal for digital filter.
90	XLT	O	Latch signal digital signal processor.
91	FOCUS SW	O	Focus switching signal output,.
92	$\overline{\text{DUB HI}}$	I	Hi speed dubbing signal input.
93	TEST-I	I	Test land.
94	$\overline{\text{OUT SW}}$	I	Out switch signal input.
95	$\overline{\text{IN SW}}$	I	Down switch signal input.
96	$\overline{\text{UP SW}}$ (5CD)	I	Up switch signal input.
97	$\overline{\text{PANEL SW}}$ (MAGK)	I	Not used.
98	$\overline{\text{CLOSE SW}}$	I	
99	$\overline{\text{OPEN SW}}$	I	
100	V_{DD}	–	+5V

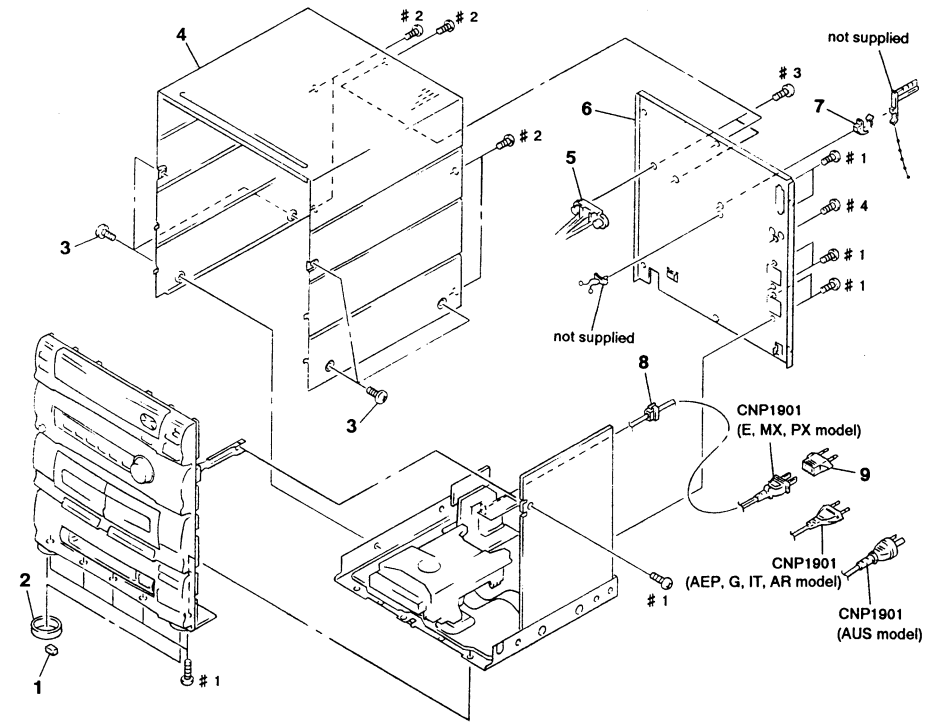
SECTION 7
EXPLODED VIEWS

NOTE:
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation
  - G : German model
  - IT : Italian model
  - MX : Mexican model
  - AUS : Australian model
  - AR : Argentine model
  - AEP1 : AEP model without power source for PS-LX56P.
  - AEP2 : AEP model with power source for PS-LX56P.

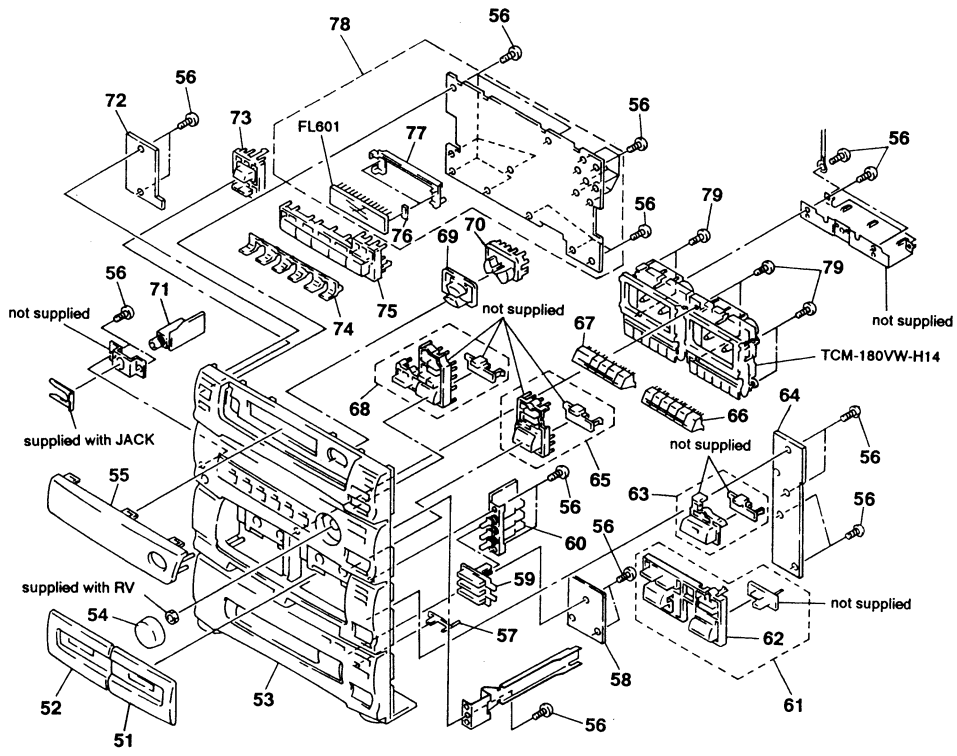
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-1. CABINET SECTION



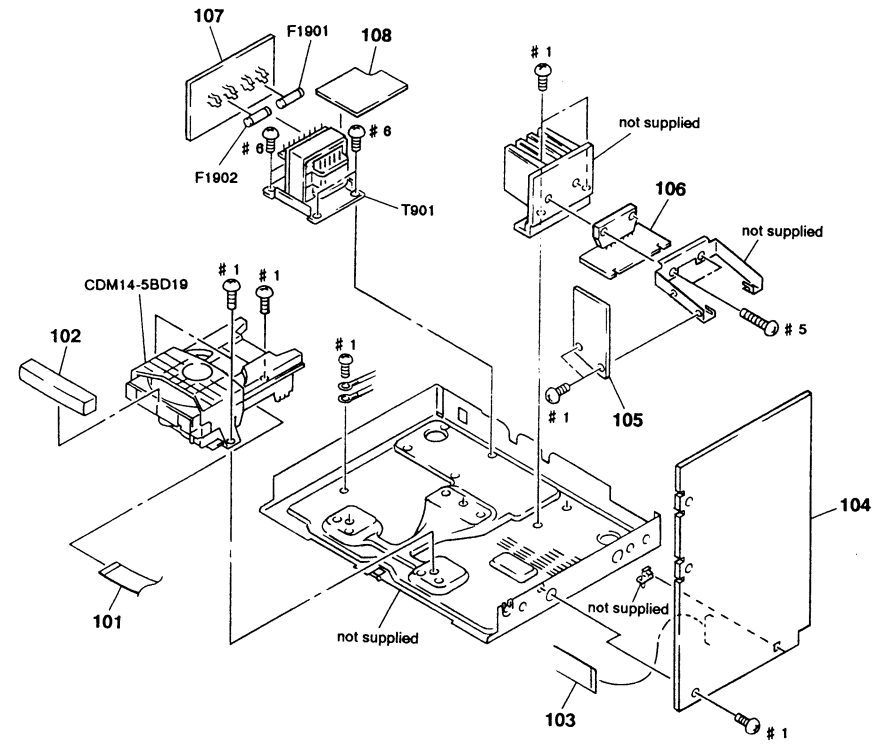
Ref. No.	Part No.	Description	Remark
1	4-948-236-01	CUSHION (107) (AEP, G, IT, AUS, PX)	
2	4-921-918-11	PLATE, ORNAMENTAL	
3	3-363-099-01	SCREW (CASE 3 TP2)	
4	4-962-725-51	CASE	
⚠5	1-570-046-21	SWITCH, VOLTAGE CHANGE (E, AR, PX)	
* 6	4-969-781-11	PANEL, BACK (AEP2)	
* 6	4-969-781-31	PANEL, BACK (AEP1) (Made in Indonesia)	
* 6	4-969-781-41	PANEL, BACK (G)	
* 6	4-969-781-51	PANEL, BACK (IT)	
* 6	4-969-781-71	PANEL, BACK (AEP1) (Made in Malaysia)	
* 6	4-970-160-01	PANEL, BACK (E)	
* 6	4-970-160-11	PANEL, BACK (AR)	
* 6	4-970-160-21	PANEL, BACK (MX)	
* 6	4-970-160-31	PANEL, BACK (PX)	
* 6	4-970-160-41	PANEL, BACK (AUS)	
* 7	4-949-235-11	HOOK (AEP, E, G, IT, MX, AR, PX)	
8	3-703-244-00	BUSHING (FBS001), CORD (AEP, G, IT, AR, AUS)	
8	4-966-266-01	BUSHING (S) (FBS002), CORD (E, MX, PX)	
⚠9	1-569-007-11	ADAPTER, CONVERSION 2P (PX)	
⚠CNP901	1-558-943-41	CORD, POWER (E, MX, PX)	
⚠CNP901	1-575-651-21	CORD, POWER (AEP, G, IT, AR)	
⚠CNP901	1-696-845-11	CORD, POWER (AUS)	

7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-4945-504-1	LID (B) ASSY, CASSETTE	
52	X-4945-503-1	LID (A) ASSY, CASSETTE	
53	4-969-656-31	PANEL, FRONT (AEP, G, IT)	
53	4-969-656-41	PANEL, FRONT (E, MX, AR, AUS, PX)	
54	4-969-683-01	KNOB (V)	
55	4-969-677-01	PLATE (ST), INDICATION	
56	4-951-620-01	SCREW (2.6X8), +BVTP	
57	4-970-712-01	INDICATOR (PAUSE)	
* 58	1-654-611-11	OPEN/CLOSE BOARD	
59	4-964-288-11	BUTTON (DDT-3)	
* 60	1-654-614-11	SW BOARD	
61	X-4945-413-1	BUTTON (CD) ASSY	
62	4-969-672-01	BUTTON (CD)	
63	X-4945-411-1	BUTTON (TC) ASSY	
* 64	1-654-609-11	TAPE FUNCTION BOARD	
65	X-4945-410-1	BUTTON (TA) ASSY (E, MX, AR, AUS, PX)	
65	X-4945-609-1	BUTTON (TA) ASSY (AEP, G, IT)	
66	4-969-674-01	BUTTON (MD-B)	
67	4-969-673-01	BUTTON (MD-A)	
68	X-4945-409-1	BUTTON (ST) ASSY	
69	4-969-666-01	BUTTON (CURSOR 1)	
70	4-969-667-01	BUTTON (CURSOR 2)	
* 71	1-654-613-11	H.P BOARD	
* 72	1-654-610-11	STANDBY BOARD	
73	4-969-665-01	BUTTON (POWER)	
74	4-969-684-01	INDICATOR (SE5)	
75	4-969-670-01	BUTTON (SELECT 5) (AEP, G, IT, AUS, PX)	
75	4-969-670-11	BUTTON (SELECT 5) (E, MX, AR)	
* 76	4-949-935-21	CUSHION (FL)	
* 77	4-970-711-01	HOLDER, FL TUBE	
* 78	A-4371-937-A	PANEL BOARD, COMPLETE (E, MX, AR, AUS, PX)	
* 78	A-4371-962-A	PANEL BOARD, COMPLETE (AEP, G, IT)	
79	4-951-620-11	SCREW (2.6X10), +BVTP	
FL601	1-517-364-11	INDICATOR TUBE, FLUORESCENT	

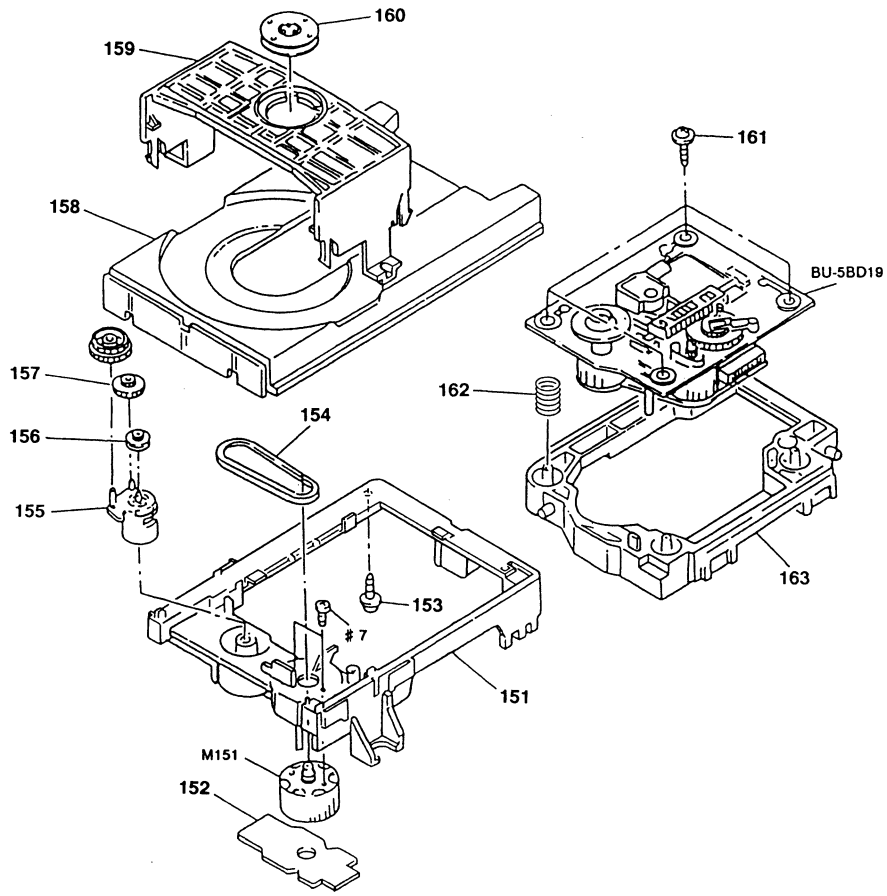
7-3. CHASSIS SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

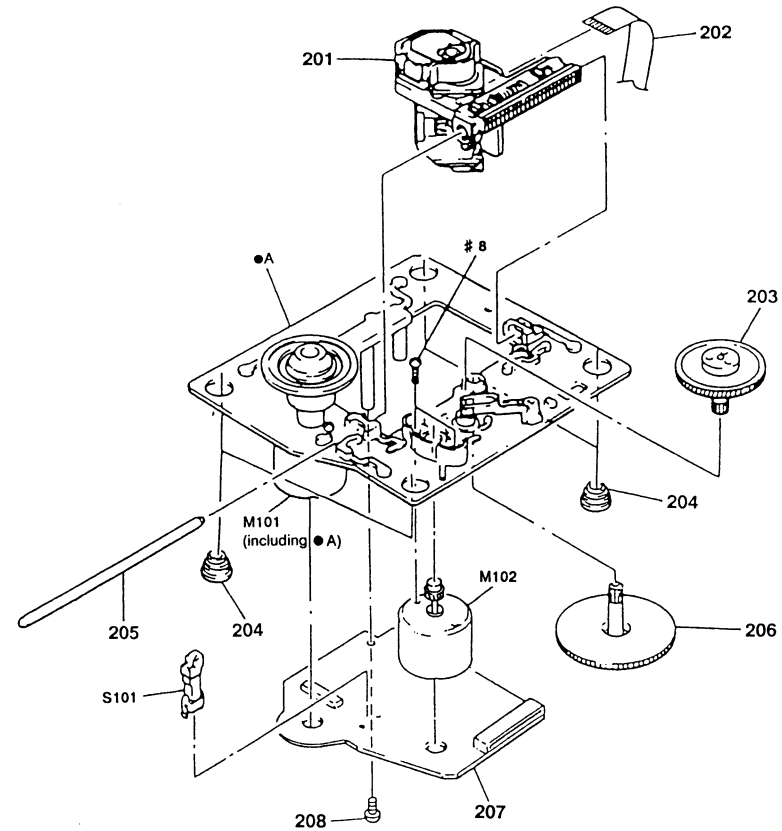
Ref. No.	Part No.	Description	Remark
101	1-769-304-11	WIRE (FLAT TYPE) (19 CORE)	
102	4-969-689-01	PANEL, LOADING	
103	1-690-590-31	WIRE, FLAT TYPE (13 CORE)	
* 104	A-4371-954-A	MAIN BOARD, COMPLETE (E, MX)	
* 104	A-4371-969-A	MAIN BOARD, COMPLETE (AEP2)	
* 104	A-4377-203-A	MAIN BOARD, COMPLETE (AEP1)	
* 104	A-4377-205-A	MAIN BOARD, COMPLETE (AR)	
* 104	A-4377-456-A	MAIN BOARD, COMPLETE (AUS, PX)	
* 104	A-4377-589-A	MAIN BOARD, COMPLETE (G)	
* 104	A-4377-596-A	MAIN BOARD, COMPLETE (IT)	
* 105	A-4377-985-A	DBFB BOARD, COMPLETE (E, MX, AR, AUS, PX)	
* 106	A-4371-959-A	POWER AMPLIFIER BOARD, COMPLETE (E, MX, AR, AUS, PX)	
* 106	A-4371-977-A	POWER AMPLIFIER BOARD, COMPLETE (AEP, G, IT)	
* 107	1-654-617-11	POWER (B) BOARD	
* 108	1-654-616-11	POWER (A) BOARD	
⚠F1901	1-532-350-00	FUSE, TIME LUG (T4A/125V)	
⚠F1902	1-532-350-00	FUSE, TIME LUG (T4A/125V)	
⚠T901	1-427-687-11	TRANSFORMER, POWER (AEP, G, IT)	
⚠T901	1-427-688-11	TRANSFORMER, POWER (E, MX, AR, AUS, PX)	

7-4. CD MECHANISM SECTION (CDM14-5BD19)



Ref. No.	Part No.	Description	Remark
151	4-933-111-01	CHASSIS (MD)	
152	1-645-721-11	LOADING BOARD	
153	4-917-583-21	BRACKET, YOKE	
154	4-927-649-01	BELT	
155	4-933-109-01	CAM	
156	4-927-651-01	PULLEY (S)	
157	4-967-268-01	GEAR (C)	
158	4-933-112-01	TABLE, DISK	
159	4-933-110-01	HOLDER (MG)	
160	1-452-538-11	MAGNET	
161	4-933-134-01	SCREW (+PTPWH M2.6X6)	
162	4-959-996-01	SPRING (932), COMPRESSION	
163	4-933-129-01	HOLDER (BU)	
M151	A-4604-363-A	MOTOR (L) ASSY (LOADING)	

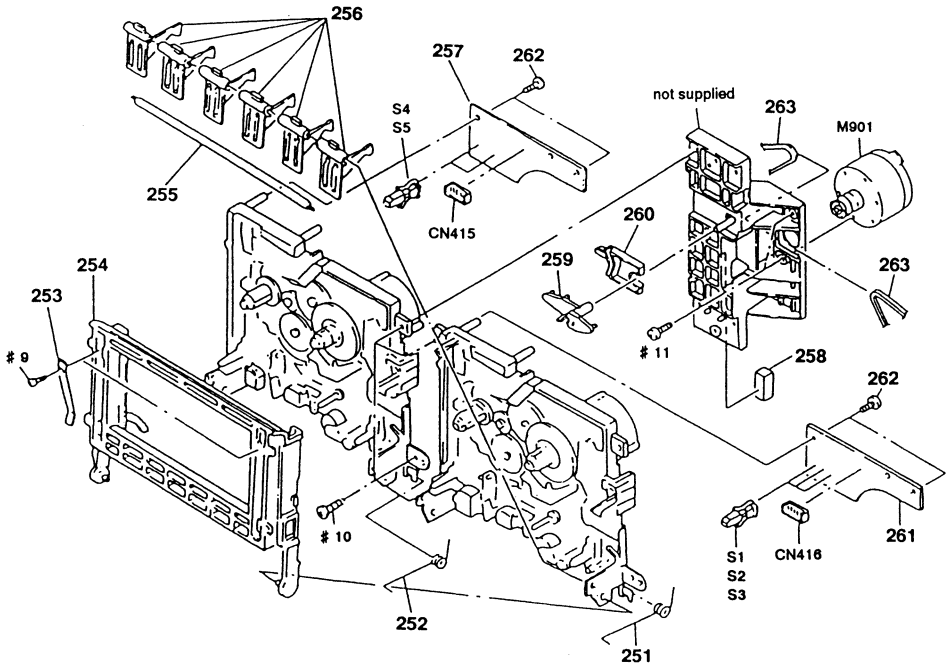
7-5. BASE UNIT SECTION (BU-5BD19)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

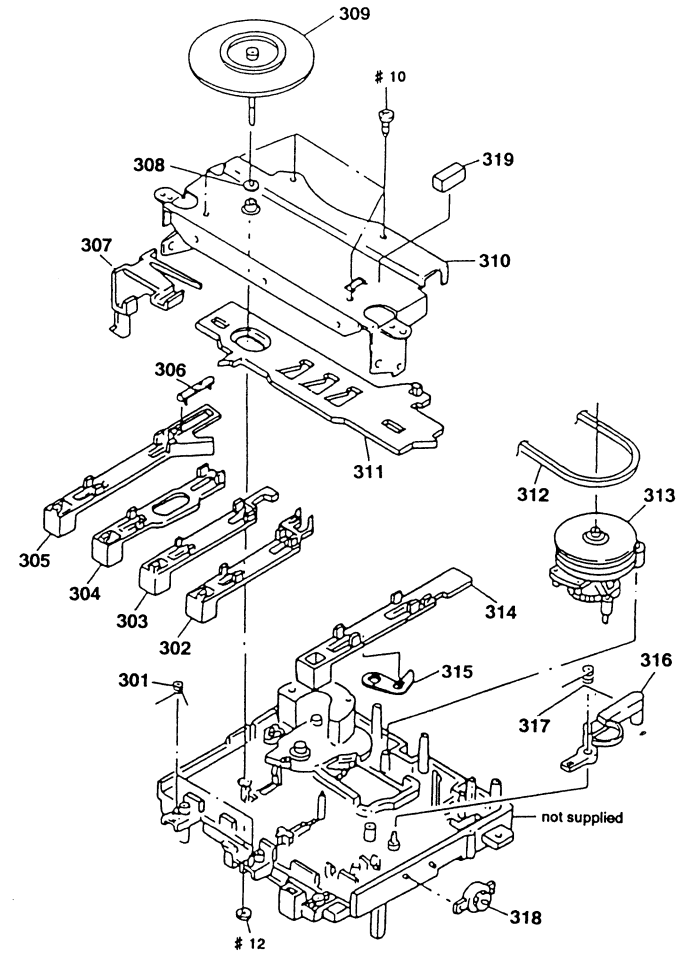
Ref. No.	Part No.	Description	Remark
⚠201	8-848-387-01	OPTICAL PICK-UP BLOCK (KSS-213BA/S-N)	
202	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
203	4-917-567-21	GEAR (M)	
204	4-951-940-01	INSULATOR (BU)	
205	4-917-565-01	SHAFT, SLED	
206	4-917-564-01	GEAR (P), FLATNESS	
* 207	A-4673-402-A	BD BOARD, COMPLETE	
208	4-951-620-01	SCREW (2.6X8), +BVTP	
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	

7-6. MECHANISM DECK SECTION 1 (TCM-180VW-H14)



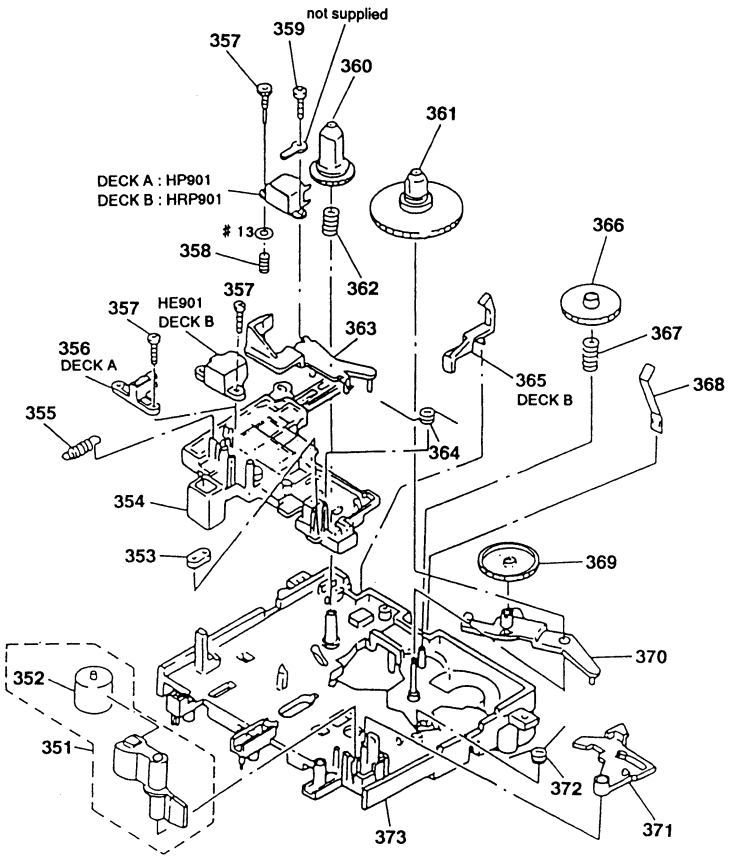
Ref. No.	Part No.	Description	Remark
251	3-358-287-01	SPRING (LOADING A), TORSION	
252	3-358-229-01	SPRING (LOADING), TORSION	
253	3-358-209-01	SPRING (CASSETTE HOLDER), LEAF	
254	3-358-266-02	HOLDER, CASSETTE	
255	3-371-917-01	SHAFT (BUTTON SHAFT 4)	
256	3-369-335-01	LEVER (BUTTON BASE F)	
* 257	1-640-702-11	LEAF SW (A) BOARD	
* 258	3-358-289-01	SPACER (VIBRATION PROOF MAT)	
259	3-358-203-01	LEVER (TRIGGER)	
260	3-358-202-01	SLIDER (TRIGGER)	
* 261	1-640-703-11	LEAF SW (B) BOARD	
262	4-951-620-01	SCREW (2.6X8), +BVTP	
263	3-364-777-01	BELT (WH)	
* CN415	1-568-942-11	PIN, CONNECTOR 4P	
* CN416	1-568-943-11	PIN, CONNECTOR 5P	
M901	X-3362-377-1	MOTOR (WH) ASSY (REEL/CAPSTAN)	
S1	1-571-736-11	SWITCH, LEAF (MOTOR B)	
S2	1-571-736-11	SWITCH, LEAF (PLAY B)	
S3	1-571-736-11	SWITCH, LEAF (REC B)	
S4	1-571-736-11	SWITCH, LEAF (MOTOR A)	
S5	1-571-736-11	SWITCH, LEAF (PLAY A)	

7-7. MECHANISM DECK SECTION 2 (TCM-180VW-H14)



Ref. No.	Part No.	Description	Remark
301	3-358-232-01	SPRING (S-P F-R), TORSION	
302	3-358-258-01	SLIDER (REW)	
303	3-358-257-01	SLIDER (FF)	
304	3-358-256-01	SLIDER (STOP/EJECT)	
305	3-358-260-01	SLIDER (PAUSE)	
* 306	3-358-226-01	LEVER (PAUSE LEVER)	
* 307	3-358-261-02	SLIDER (HOLDER LOCK)	
308	3-701-437-01	WASHER	
309	X-3358-205-1	FLYWHEEL (A) ASSY (DECK B)	
309	X-3366-859-1	FLYWHEEL (D) ASSY (DECK A)	
310	X-3365-582-1	BRACKET (D) ASSY	
* 311	3-358-249-01	SLIDER (LOCK PLATE)	
312	3-358-230-01	BELT (A1)	
313	X-3358-202-1	LEVER (FR ARM) ASSY	
314	3-358-259-01	SLIDER (REC) (DECK B)	
* 315	3-358-204-01	LEVER (REC SAFETY) (DECK B)	
316	3-358-286-01	LEVER (MOTOR LEVER)	
317	3-358-214-01	SPRING (LOCK), TORSION (DECK A)	
317	3-358-233-01	SPRING (REC-LOCK), TORSION (DECK B)	
318	3-319-224-51	DAMPER, SMALL	
* 319	3-358-289-01	SPACER (VIBRATION PROOF MAT) (DECK B)	

7-8. MECHANISM DECK SECTION 3 (TCM-180VW-H14)



Ref.No.	Part No.	Description	Remark
351	X-3358-204-1	LEVER (PINCH LEVER) ASSY	
352	3-578-143-11	PINCH ROLLER	
* 353	3-358-215-01	BUSHING (WIRE KIT RETAINER)	
354	3-358-265-01	SLIDER (HEAD PC BOARD A)	
355	3-358-217-01	SPRING, TENSION	
* 356	3-363-931-01	GUIDE, TAPE	
357	3-358-288-11	SCREW (T), AZIMUTH	
358	3-358-234-01	SPRING (AZIMUTH), COMPRESSION	
359	3-358-288-01	SCREW (T), AZIMUTH	
360	3-358-248-01	GEAR (SUPPLY REEL)	
361	X-3358-203-1	TABLE (T) ASSY, REEL	
362	3-358-208-01	SPRING (SUPPLY), COMPRESSION	
* 363	3-358-251-01	LEVER (TENSION DETECTION ARM)	
364	3-358-228-01	SPRING, TORSION	
* 365	3-358-255-01	LEVER (GB LEVER) (DECK B)	
* 366	3-358-224-01	GEAR (FF GEAR)	
367	3-358-207-01	SPRING (FF GEAR), COMPRESSION	
368	3-358-227-01	SPRING, LEAF	
* 369	3-358-284-01	GEAR (TU GEAR)	
* 370	3-358-252-01	LEVER (TU ARM)	
* 371	3-358-253-01	LEVER (SHUT-OFF LEVER)	
372	3-358-243-01	SPRING (TU-SHUT), TORSION	
373	X-3358-207-2	CHASSIS (A) ASSY	
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK B)	
HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A)	
HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK B)	

SECTION 8
ELECTRICAL PARTS LIST

BD

NOTE:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH
- Abbreviation
  G : German model
  IT : Italian model
  MX : Mexican model
  AUS : Australian model
  AR : Argentine model
  AEP1 : AEP model without power source for PS-LX56P
  AEP2 : AEP model with power source for PS-LX56P

Ref.No.	Part No.	Description			Remark
*	A-4673-402-A	BD BOARD, COMPLETE **********			
		< CAPACITOR >			
C101	1-126-607-11	ELECT CHIP	47uF	20%	4V
C102	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C103	1-164-346-11	CERAMIC CHIP	1uF		16V
C105	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C106	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C107	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C108	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C109	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C111	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C112	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C113	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C114	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C117	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C118	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C119	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C120	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C121	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C122	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C123	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C124	1-126-607-11	ELECT CHIP	47uF	20%	4V
C125	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C126	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C127	1-164-695-11	CERAMIC CHIP	0.0022uF	5%	50V
C128	1-163-135-00	CERAMIC CHIP	560PF	5%	50V
C129	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C130	1-164-336-11	CERAMIC CHIP	0.33uF		25V
C131	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C132	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C133	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C134	1-164-346-11	CERAMIC CHIP	1uF		16V
C135	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C136	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C137	1-164-232-11	CERAMIC CHIP	0.01uF		50V
C139	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C140	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C141	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C142	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C145	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C146	1-135-201-11	TANTALUM CHIP	10uF	20%	4V
C147	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C148	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C149	1-164-346-11	CERAMIC CHIP	1uF		16V
C153	1-135-259-11	TANTAL. CHIP	10uF	20%	6.3V
C154	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
		< CONNECTOR >			
CNU101	1-770-014-11	CONNECTOR, FFC/FPC 16P			
CNU102	1-770-013-11	CONNECTOR, FFC/FPC 19P			
		< IC >			
IC101	8-752-069-56	IC CXA1782BQ			
IC102	8-759-291-06	IC BA6397FP-T1			
IC103	8-752-372-94	IC CXD2507AQ			
IC104	8-759-185-29	IC PCM1710U-BT1			
		< MOTOR >			
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)			
M102	X-4917-501-1	MOTOR ASSY (SLED)			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-RT1			
Q102	8-729-424-08	TRANSISTOR UN2111			
Q103	8-729-421-22	TRANSISTOR UN2211			
		< RESISTOR >			
R102	1-216-001-00	METAL CHIP	10	5%	1/10W
R103	1-216-049-00	METAL CHIP	1K	5%	1/10W
R104	1-216-097-00	METAL CHIP	100K	5%	1/10W
R105	1-216-089-00	METAL CHIP	47K	5%	1/10W
R106	1-216-089-00	METAL CHIP	47K	5%	1/10W
R107	1-216-089-00	METAL CHIP	47K	5%	1/10W

Ref.No.	Part No.	Description				Remark
R108	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R109	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R112	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R113	1-216-077-00	METAL CHIP	15K	5%	1/10W	
R114	1-216-101-00	METAL CHIP	150K	5%	1/10W	
R115	1-216-101-00	METAL CHIP	150K	5%	1/10W	
R116	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R117	1-216-093-00	METAL CHIP	68K	5%	1/10W	
R118	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R119	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R120	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R121	1-216-114-00	METAL GLAZE	510K	5%	1/10W	
R122	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R123	1-216-099-00	METAL CHIP	120K	5%	1/10W	
R124	1-216-091-00	METAL CHIP	56K	5%	1/10W	
R125	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R126	1-216-063-00	METAL CHIP	3.9K	5%	1/10W	
R127	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R128	1-216-105-91	METAL GLAZE	220K	5%	1/10W	
R129	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R130	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R131	1-216-079-00	METAL CHIP	18K	5%	1/10W	
R132	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R133	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R134	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R135	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R136	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R137	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R138	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R139	1-216-033-00	METAL CHIP	220	5%	1/10W	
R140	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R141	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R142	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
R143	1-216-121-00	METAL CHIP	1M	5%	1/10W	
R144	1-216-073-00	METAL CHIP	10K	5%	1/10W	
R145	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R146	1-216-097-00	METAL CHIP	100K	5%	1/10W	
R147	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R148	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R149	1-216-049-00	METAL CHIP	1K	5%	1/10W	
R150	1-216-037-00	METAL CHIP	330	5%	1/10W	
R151	1-216-037-00	METAL CHIP	330	5%	1/10W	
R152	1-216-037-00	METAL CHIP	330	5%	1/10W	
R153	1-216-089-00	METAL CHIP	47K	5%	1/10W	
R154	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W	
R157	1-216-069-00	METAL CHIP	6.8K	5%	1/10W	
R158	1-216-001-00	METAL CHIP	10	5%	1/10W	

Ref.No.	Part No.	Description				Remark
		< VARIABLE RESISTOR >				
RV101	1-241-396-11	RES, ADJ, METAL GLAZE 22K				
RV102	1-241-396-11	RES, ADJ, METAL GLAZE 22K				
RV103	1-241-396-11	RES, ADJ, METAL GLAZE 22K				
		< SWITCH >				
S101	1-572-085-11	SWITCH, LEAF (LIMIT)				
		< VIBRATOR >				
X101	1-579-280-11	VIBRATOR, CRYSTAL (16.9344MHz)				
**********						
*	A-4377-985-A	DBFB BOARD, COMPLETE (E, MX, AR, AUS, PX)				
		**********				
		< CAPACITOR >				
C2101	1-124-925-11	ELECT	2.2uF	20%	100V	
C2102	1-136-165-00	FILM	0.1uF	5%	50V	
C2103	1-136-165-00	FILM	0.1uF	5%	50V	
C2131	1-126-101-11	ELECT	100uF	20%	16V	
C2132	1-126-101-11	ELECT	100uF	20%	16V	
C2133	1-124-902-00	ELECT	0.47uF	20%	50V	
C2151	1-124-925-11	ELECT	2.2uF	20%	100V	
C2152	1-136-165-00	FILM	0.1uF	5%	50V	
C2153	1-136-165-00	FILM	0.1uF	5%	50V	
		< CONNECTOR >				
CN1201	1-564-506-11	PLUG, CONNECTOR 3P				
CN2102	1-564-511-11	PLUG, CONNECTOR 8P				
		< DIODE >				
D2101	8-719-987-63	DIODE 1N4148M				
D2102	8-719-933-47	DIODE HZS7B2L				
D2103	8-719-933-47	DIODE HZS7B2L				
		< IC >				
IC2101	8-759-634-51	IC M5218AP				
		< TRANSISTOR >				
Q2101	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q2102	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q2151	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q2152	8-729-119-78	TRANSISTOR 2SC2785-HFE				
		< RESISTOR >				
R2101	1-249-437-11	CARBON	47K	5%	1/4W	
R2102	1-247-807-31	CARBON	100	5%	1/4W	
R2103	1-249-429-11	CARBON	10K	5%	1/4W	
R2104	1-247-863-91	CARBON	22K	5%	1/4W	

Ref.No.	Part No.	Description				Remark
R2105	1-247-903-00	CARBON	1M	5%	1/4W	
R2106	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R2107	1-247-895-00	CARBON	470K	5%	1/4W	
R2108	1-247-871-11	CARBON	47K	5%	1/4W	
R2131	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R2132	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R2133	1-249-429-11	CARBON	10K	5%	1/4W	
R2134	1-249-429-11	CARBON	10K	5%	1/4W	
R2135	1-249-827-11	CARBON	680	5%	1/4W	F
R2136	1-249-441-11	CARBON	100K	5%	1/4W	
R2137	1-247-903-00	CARBON	1M	5%	1/4W	
R2151	1-249-437-11	CARBON	47K	5%	1/4W	
R2152	1-247-807-31	CARBON	100	5%	1/4W	
R2153	1-249-429-11	CARBON	10K	5%	1/4W	
R2154	1-247-863-91	CARBON	22K	5%	1/4W	
R2155	1-247-903-00	CARBON	1M	5%	1/4W	
R2156	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R2157	1-247-895-00	CARBON	470K	5%	1/4W	
R2158	1-247-871-11	CARBON	47K	5%	1/4W	
**********						
*	1-654-613-11	H.P BOARD				
		*********				
		< CAPACITOR >				
C1201	1-162-282-31	CERAMIC	100PF	10%	50V (AEP, G, IT)	
C1202	1-162-282-31	CERAMIC	100PF	10%	50V (AEP, G, IT)	
C1203	1-164-159-11	CERAMIC	0.1uF		50V	
C1204	1-164-159-11	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
* CN1205	1-568-954-11	PIN, CONNECTOR 5P				
		< JACK >				
J1201	1-569-113-11	JACK, LARGE TYPE (HEADPHONES)				
**********						
*	1-640-702-11	LEAF SW (A) BOARD				
		**********				
		< CAPACITOR >				
C544	1-164-159-11	CERAMIC	0.1uF		50V	
		< CONNECTOR >				
* CN415	1-568-942-11	PIN, CONNECTOR 4P				

Ref.No.	Part No.	Description	Remark
		< SWITCH >	
S4	1-571-736-11	SWITCH, LEAF (MOTOR A)	
S5	1-571-736-11	SWITCH, LEAF (PLAY A)	
**********			
*	1-640-703-11	LEAF SW (B) BOARD	
		**********	
		< CAPACITOR >	
C545	1-164-159-11	CERAMIC 0.1uF	50V
		< CONNECTOR >	
* CN416	1-568-943-11	PIN, CONNECTOR 5P	
		< SWITCH >	
S1	1-571-736-11	SWITCH, LEAF (MOTOR B)	
S2	1-571-736-11	SWITCH, LEAF (PLAY B)	
S3	1-571-736-11	SWITCH, LEAF (REC B)	
**********			
	1-645-721-11	LOADING BOARD	
		**********	
		< CONNECTOR >	
* CN151	1-568-943-11	PIN, CONNECTOR 5P	
		< SWITCH >	
S271	1-572-086-11	SWITCH, LEAF (LOAD OUT)	
S272	1-572-086-11	SWITCH, LEAF (LOAD IN)	
**********			

Ref. No.	Part No.	Description			Remark
*	A-4371-954-A	MAIN BOARD, COMPLETE (E, MX)			
		**********			
*	A-4371-969-A	MAIN BOARD, COMPLETE (AEP2)			
		**********			
*	A-4377-203-A	MAIN BOARD, COMPLETE (AEP1)			
		**********			
*	A-4377-205-A	MAIN BOARD, COMPLETE (AR)			
		**********			
*	A-4377-456-A	MAIN BOARD, COMPLETE (AUS, PX)			
		**********			
*	A-4377-589-A	MAIN BOARD, COMPLETE (G)			
		**********			
*	A-4377-596-A	MAIN BOARD, COMPLETE (IT)			
		**********			
	1-537-770-11	TERMINAL BOARD, GROUND			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
C1	1-162-306-11	CERAMIC	0.01uF	30%	16V
C2	1-124-477-11	ELECT	47uF	20%	25V (AEP, G, IT)
C2	1-126-934-11	ELECT	220uF	20%	16V (E, MX, AR, AUS, PX)
C3	1-162-306-11	CERAMIC	0.01uF	30%	16V
C4	1-162-306-11	CERAMIC	0.01uF	30%	16V
C5	1-162-306-11	CERAMIC	0.01uF	30%	16V
C6	1-162-306-11	CERAMIC	0.01uF	30%	16V
C7	1-162-306-11	CERAMIC	0.01uF	30%	16V
C8	1-162-306-11	CERAMIC	0.01uF	30%	16V
C9	1-101-004-00	CERAMIC	0.01uF		50V (E, MX, AR, AUS, PX)
C11	1-162-306-11	CERAMIC	0.01uF	30%	16V
C12	1-124-477-11	ELECT	47uF	20%	25V (AEP, G, IT)
C12	1-126-934-11	ELECT	220uF	20%	16V (E, MX, AR, AUS, PX)
C13	1-162-306-11	CERAMIC	0.01uF	30%	16V
C14	1-162-306-11	CERAMIC	0.01uF	30%	16V
C15	1-164-159-11	CERAMIC	0.1uF		50V
C16	1-124-907-11	ELECT	10uF	20%	50V
C17	1-124-902-00	ELECT	0.47uF	20%	50V
C18	1-124-903-11	ELECT	1uF	20%	50V
C19	1-124-903-11	ELECT	1uF	20%	50V
C20	1-124-907-11	ELECT	10uF	20%	50V
C21	1-124-907-11	ELECT	10uF	20%	50V
C22	1-124-907-11	ELECT	10uF	20%	50V
C23	1-124-907-11	ELECT	10uF	20%	50V
C24	1-137-436-11	FILM	0.0039uF	5%	50V (AEP, G, IT)
C25	1-137-436-11	FILM	0.0039uF	5%	50V (AEP, G, IT)
C26	1-136-158-00	FILM	0.027uF	5%	50V (E, MX, AR, AUS, PX)
C26	1-136-160-00	FILM	0.039uF	5%	50V (AEP, G, IT)
C27	1-136-158-00	FILM	0.027uF	5%	50V (E, MX, AR, AUS, PX)
C27	1-136-160-00	FILM	0.039uF	5%	50V (AEP, G, IT)
C28	1-124-903-11	ELECT	1uF	20%	50V
C29	1-162-294-31	CERAMIC	0.001uF	10%	50V
C30	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C31	1-124-477-11	ELECT	47uF	20%	25V
C32	1-126-962-11	ELECT	3.3uF	20%	50V
C33	1-162-306-11	CERAMIC	0.01uF	30%	16V
C34	1-126-933-11	ELECT	100uF	20%	10V
C35	1-162-306-11	CERAMIC	0.01uF	30%	16V
C38	1-162-211-31	CERAMIC	33PF	5%	50V (AEP, G, IT)
C40	1-101-005-00	CERAMIC	22000PF		50V
C41	1-164-159-11	CERAMIC	0.1uF		50V (AEP)
C42	1-162-196-31	CERAMIC	5.6PF	10%	50V (AEP)
C42	1-162-198-31	CERAMIC	8.2PF	10%	50V (E, G, IT, MX, AR, AUS, PX)
C43	1-162-306-11	CERAMIC	0.01uF	30%	16V
C44	1-102-120-00	CERAMIC	0.0018uF	10%	50V (AEP)
C45	1-162-301-11	CERAMIC	0.0015uF	30%	16V (AEP)
C46	1-101-005-00	CERAMIC	22000PF		50V (AEP)
C51	1-164-031-11	CERAMIC	33PF	5%	50V
C52	1-164-027-11	CERAMIC	22PF	5%	50V
C53	1-162-306-11	CERAMIC	0.01uF	30%	16V
C54	1-124-477-11	ELECT	47uF	20%	25V
C55	1-162-294-31	CERAMIC	0.001uF	10%	50V
C56	1-162-306-11	CERAMIC	0.01uF	30%	16V
C57	1-162-306-11	CERAMIC	0.01uF	30%	16V
C58	1-162-306-11	CERAMIC	0.01uF	30%	16V
C61	1-124-925-11	ELECT	2.2uF	20%	100V
C62	1-164-159-11	CERAMIC	0.1uF		50V
C63	1-162-306-11	CERAMIC	0.01uF	30%	16V
C68	1-162-306-11	CERAMIC	0.01uF	30%	16V
C69	1-126-934-11	ELECT	220uF	20%	16V
C71	1-136-173-00	FILM	0.47uF	5%	50V (AEP)
C72	1-161-494-00	CERAMIC	0.022uF		25V (AEP)
C73	1-161-494-00	CERAMIC	0.022uF		25V (AEP)
C700	1-162-282-31	CERAMIC	100PF	10%	50V
C701	1-162-290-31	CERAMIC	470PF	10%	50V
C702	1-137-372-11	FILM	0.022uF	5%	50V
C703	1-124-907-11	ELECT	10uF	20%	50V

Ref. No.	Part No.	Description			Remark
C704	1-162-292-31	CERAMIC	680PF	10%	50V
C710	1-162-282-31	CERAMIC	100PF	10%	50V
C711	1-162-289-31	CERAMIC	390PF	10%	50V
C712	1-137-372-11	FILM	0.022uF	5%	50V
C713	1-124-907-11	ELECT	10uF	20%	50V
C715	1-126-176-11	ELECT	220uF	20%	10V
C721	1-137-368-11	FILM	0.0047uF	5%	50V
C722	1-124-903-11	ELECT	1uF	20%	50V
C723	1-124-927-11	ELECT	4.7uF	20%	100V
C724	1-137-399-11	FILM	0.1uF	5%	50V (AEP, G, IT)
C726	1-124-903-11	ELECT	1uF	20%	50V
C727	1-124-902-00	ELECT	0.47uF	20%	50V
C728	1-124-927-11	ELECT	4.7uF	20%	100V
C729	1-162-291-31	CERAMIC	560PF	10%	50V
C730	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C731	1-164-056-11	CERAMIC	27PF	5%	50V
C732	1-101-890-00	CERAMIC	75PF	5%	50V
C733	1-162-288-31	CERAMIC	330PF	10%	50V
C734	1-164-066-11	CERAMIC	68PF	5%	50V
C800	1-162-282-31	CERAMIC	100PF	10%	50V
C801	1-162-290-31	CERAMIC	470PF	10%	50V
C802	1-137-372-11	FILM	0.022uF	5%	50V
C803	1-124-907-11	ELECT	10uF	20%	50V
C804	1-162-292-31	CERAMIC	680PF	10%	50V
C810	1-162-282-31	CERAMIC	100PF	10%	50V
C811	1-162-289-31	CERAMIC	390PF	10%	50V
C812	1-137-372-11	FILM	0.022uF	5%	50V
C813	1-124-907-11	ELECT	10uF	20%	50V
C815	1-126-176-11	ELECT	220uF	20%	10V
C821	1-137-368-11	FILM	0.0047uF	5%	50V
C822	1-124-903-11	ELECT	1uF	20%	50V
C823	1-124-927-11	ELECT	4.7uF	20%	100V
C824	1-137-399-11	FILM	0.1uF	5%	50V (AEP, G, IT)
C826	1-124-903-11	ELECT	1uF	20%	50V
C827	1-124-902-00	ELECT	0.47uF	20%	50V
C828	1-124-927-11	ELECT	4.7uF	20%	100V
C829	1-162-291-31	CERAMIC	560PF	10%	50V
C830	1-162-301-11	CERAMIC	0.0015uF	30%	16V
C831	1-164-056-11	CERAMIC	27PF	5%	50V
C832	1-101-890-00	CERAMIC	75PF	5%	50V
C833	1-162-288-31	CERAMIC	330PF	10%	50V
C834	1-164-066-11	CERAMIC	68PF	5%	50V
C903	1-126-176-11	ELECT	220uF	20%	10V
C904	1-126-176-11	ELECT	220uF	20%	10V
C905	1-124-443-00	ELECT	100uF	20%	10V
C906	1-124-443-00	ELECT	100uF	20%	10V
C907	1-124-443-00	ELECT	100uF	20%	10V
C908	1-124-443-00	ELECT	100uF	20%	10V
C909	1-124-907-11	ELECT	10uF	20%	50V
C910	1-124-907-11	ELECT	10uF	20%	50V
C915	1-126-933-11	ELECT	100uF	20%	16V
C920	1-162-306-11	CERAMIC	0.01uF	30%	16V
C921	1-124-925-11	ELECT	2.2uF	20%	100V
C922	1-130-848-00	FILM	0.0082uF	5%	100V
C923	1-124-925-11	ELECT	2.2uF	20%	100V
C924	1-137-438-11	FILM	0.0082uF	5%	50V
C925	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C926	1-137-436-11	FILM	0.0039uF	5%	50V
C927	1-137-436-11	FILM	0.0039uF	5%	50V
C928	1-137-372-11	FILM	0.022uF	5%	50V
C929	1-124-120-11	ELECT	220uF	20%	25V
C931	1-124-120-11	ELECT	220uF	20%	25V
C932	1-164-159-11	CERAMIC	0.1uF		50V
C933	1-164-159-11	CERAMIC	0.1uF		50V
C934	1-164-159-11	CERAMIC	0.1uF		50V
C938	1-162-282-31	CERAMIC	100PF	10%	50V
C941	1-124-927-11	ELECT	4.7uF	20%	100V
C942	1-164-159-11	CERAMIC	0.1uF		50V
C943	1-124-903-11	ELECT	1uF	20%	50V (AEP, G, IT)
C1001	1-162-286-21	CERAMIC	220PF	10%	50V (AEP, G, IT)
C1003	1-162-282-31	CERAMIC	100PF	10%	50V
C1004	1-162-282-31	CERAMIC	100PF	10%	50V
C1005	1-124-927-11	ELECT	4.7uF	20%	100V
C1006	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C1007	1-162-301-11	CERAMIC	0.0015uF	20%	16V
C1008	1-124-464-11	ELECT	0.22uF	20%	50V
C1009	1-124-477-11	ELECT	47uF	20%	25V (AEP, G, IT)
C1010	1-164-159-11	CERAMIC	0.1uF		50V
C1048	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C1049	1-124-907-11	ELECT	10uF	20%	50V
C1051	1-162-286-21	CERAMIC	220PF	10%	50V (AEP, G, IT)
C1053	1-162-282-31	CERAMIC	100PF	10%	50V
C1054	1-162-282-31	CERAMIC	100PF	10%	50V
C1055	1-124-927-11	ELECT	4.7uF	20%	100V
C1056	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C1057	1-162-301-11	CERAMIC	0.0015uF	20%	16V
C1058	1-124-464-11	ELECT	0.22uF	20%	50V
C1059	1-124-477-11	ELECT	47uF	20%	25V (AEP, G, IT)
C1060	1-164-159-11	CERAMIC	0.1uF		50V
C1083	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1084	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1098	1-162-600-11	CERAMIC	0.0047uF	30%	16V
C1099	1-124-907-11	ELECT	10uF	20%	50V
C1101	1-137-440-11	FILM	0.018uF	5%	50V

MAIN

Ref.No.	Part No.	Description			Remark
C1102	1-124-903-11	ELECT	1uF	20%	50V
C1103	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C1104	1-137-443-11	FILM	0.056uF	5%	50V
C1105	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C1106	1-136-171-00	FILM	0.33uF	5%	50V
C1107	1-136-167-00	FILM	0.15uF	5%	50V
C1111	1-137-372-11	FILM	0.022uF	5%	50V
C1131	1-124-902-00	ELECT	0.47uF	20%	50V (E, MX, AR, AUS, PX)
C1131	1-124-907-11	ELECT	10uF	20%	50V (AEP, G, IT)
C1132	1-124-907-11	ELECT	10uF	20%	50V
C1133	1-124-927-11	ELECT	4.7uF	20%	100V
C1151	1-137-440-11	FILM	0.018uF	5%	50V
C1152	1-124-903-11	ELECT	1uF	20%	50V
C1153	1-162-302-11	CERAMIC	0.0022uF	20%	16V
C1154	1-137-443-11	FILM	0.056uF	5%	50V
C1155	1-162-600-11	CERAMIC	0.0047uF	20%	16V
C1156	1-136-171-00	FILM	0.33uF	5%	50V
C1157	1-136-167-00	FILM	0.15uF	5%	50V
C1161	1-137-443-11	FILM	0.056uF	5%	50V
C1181	1-124-902-00	ELECT	0.47uF	20%	50V (E, MX, AR, AUS, PX)
C1181	1-124-907-11	ELECT	10uF	20%	50V (AEP, G, IT)
C1182	1-124-907-11	ELECT	10uF	20%	50V
C1191	1-124-907-11	ELECT	10uF	20%	50V
C1192	1-124-907-11	ELECT	10uF	20%	50V
C1193	1-124-907-11	ELECT	10uF	20%	50V
C1199	1-164-159-11	CERAMIC	0.1uF		50V
C1221	1-124-443-00	ELECT	100uF	20%	10V
C1222	1-126-176-11	ELECT	220uF	20%	10V
C1223	1-126-176-11	ELECT	220uF	20%	10V
C1224	1-124-925-11	ELECT	2.2uF	20%	100V
C1247	1-161-494-00	CERAMIC	0.022uF		25V (AEP, G, IT)
C1248	1-137-375-11	FILM	0.068uF	5%	50V (AEP, G, IT)
C1249	1-137-375-11	FILM	0.068uF	5%	50V (AEP, G, IT)
C1297	1-161-494-00	CERAMIC	0.022uF		25V (AEP, G, IT)
C1298	1-137-375-11	FILM	0.068uF	5%	50V (AEP, G, IT)
C1299	1-137-375-11	FILM	0.068uF	5%	50V (AEP, G, IT)
C1301	1-136-165-00	FILM	0.1uF	5%	50V
C1302	1-136-165-00	FILM	0.1uF	5%	50V
C1303	1-126-974-11	ELECT	3300uF	20%	50V (E, MX, AR, AUS, PX)
C1303	1-128-549-11	ELECT	3300uF	20%	35V (AEP, G, IT)
C1304	1-126-974-11	ELECT	3300uF	20%	50V (E, MX, AR, AUS, PX)
C1304	1-128-549-11	ELECT	3300uF	20%	35V (AEP, G, IT)
C1305	1-126-105-11	ELECT	1000uF	20%	35V
C1306	1-126-101-11	ELECT	100uF	20%	16V
C1307	1-124-477-11	ELECT	47uF	20%	25V
C1321	1-124-122-11	ELECT	100uF	20%	50V
C1322	1-124-122-11	ELECT	100uF	20%	50V
C1331	1-136-165-00	FILM	0.1uF	5%	50V
C1332	1-136-165-00	FILM	0.1uF	5%	50V
C1333	1-124-910-11	ELECT	47uF	20%	50V
C1334	1-124-122-11	ELECT	100uF	20%	50V
C1335	1-124-771-00	ELECT	6800uF	20%	25V
C1336	1-124-636-00	ELECT	3300uF	20%	25V
C1341	1-124-907-11	ELECT	10uF	20%	50V
C1342	1-124-463-00	ELECT	0.1uF	20%	50V
C1343	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1344	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1345	1-124-907-11	ELECT	10uF	20%	50V
C1346	1-124-907-11	ELECT	10uF	20%	50V
C1361	1-124-473-11	ELECT	1000uF	20%	10V
C1362	1-124-473-11	ELECT	1000uF	20%	10V
C1364	1-126-927-11	ELECT	2200uF	20%	6.3V
C1365	1-124-472-11	ELECT	470uF	20%	10V
C1371	1-124-477-11	ELECT	47uF	20%	25V (AEP2, E, MX)
C1382	1-124-443-00	ELECT	100uF	20%	10V
C1383	1-126-101-11	ELECT	100uF	20%	16V
C1391	1-124-472-11	ELECT	470uF	20%	10V
C1502	1-164-159-11	CERAMIC	0.1uF		50V
C1503	1-164-159-11	CERAMIC	0.1uF		50V
C1504	1-164-159-11	CERAMIC	0.1uF		50V
C1567	1-164-159-11	CERAMIC	0.1uF		50V
C1568	1-162-282-31	CERAMIC	100PF	10%	50V
C1851	1-124-443-00	ELECT	100uF	20%	10V
C1852	1-164-159-11	CERAMIC	0.1uF		50V
C1853	1-102-948-00	CERAMIC	11PF	5%	50V
C1854	1-102-948-00	CERAMIC	11PF	5%	50V
C1855	1-124-443-00	ELECT	100uF	20%	10V
C1861	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1862	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1863	1-164-159-11	CERAMIC	0.1uF		50V
C1865	1-124-442-00	ELECT	330uF	20%	6.3V
C1866	1-124-442-00	ELECT	330uF	20%	6.3V
C1867	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1868	1-164-159-11	CERAMIC	0.1uF		50V
C1869	1-162-294-31	CERAMIC	0.001uF	10%	50V
C1870	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1872	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1901	1-162-306-11	CERAMIC	0.01uF	30%	16V
C1902	1-161-494-00	CERAMIC	0.022uF		25V
C1903	1-126-927-11	ELECT	2200uF	20%	10V
C1905	1-164-159-11	CERAMIC	0.1uF		50V
C1906	1-164-159-11	CERAMIC	0.1uF		50V
C1907	1-164-159-11	CERAMIC	0.1uF		50V

< FILTER >

CF1	1-567-389-11	FILTER, CERAMIC (10.7MHz)
CF2	1-760-393-11	FILTER, CERAMIC (10.7MHz) (AEP, G, IT)
CF3	1-567-389-11	FILTER, CERAMIC (10.7MHz) (E, MX, AR, AUS, PX)
CF3	1-760-393-11	FILTER, CERAMIC (10.7MHz) (AEP, G, IT)
CF4	1-760-220-11	FILTER, CERAMIC (10.7MHz)
CF5	1-527-981-00	FILTER, CERAMIC (450kHz)
CF6	1-577-075-11	OSCILLATOR, CERAMIC (456kHz)

< CONNECTOR >

CN903	1-564-506-11	PLUG, CONNECTOR 3P
* CN904	1-564-509-11	PLUG, CONNECTOR 6P
CN905	1-564-505-11	PLUG, CONNECTOR 2P
* CN906	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P
* CN911	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P
* CN912	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P
* CN913	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P
* CN1001	1-565-042-11	HOUSING, CONNECTOR (PC BOARD) 5P
CN1301	1-764-332-11	PIN, CONNECTOR (PCB) (V TYPE) 9P
* CN1371	1-566-210-11	PIN, CONNECTOR 3P (POWER SOURCE) (AEP2, E, MX)
* CN1501	1-568-832-11	SOCKET, CONNECTOR 13P
CN1501	1-750-418-11	CONNECTOR, FFC/FPC 13P
CN1701	1-770-067-11	CONNECTOR, FFC/FPC 19P
* CN1901	1-568-954-11	PIN, CONNECTOR 5P

< DIODE >

D1	8-719-987-63	DIODE	1N4148M
D901	8-719-200-82	DIODE	11ES2
D902	8-719-987-63	DIODE	1N4148M
D903	8-719-987-63	DIODE	1N4148M
D904	8-719-987-63	DIODE	1N4148M
D905	8-719-987-63	DIODE	1N4148M
D906	8-719-987-63	DIODE	1N4148M
D1101	8-719-987-63	DIODE	1N4148M
D1204	8-719-987-63	DIODE	1N4148M
D1205	8-719-987-63	DIODE	1N4148M
D1206	8-719-987-63	DIODE	1N4148M
D1301	8-719-312-09	DIODE	RBA-402
D1309	8-719-987-63	DIODE	1N4148M
D1310	8-719-987-63	DIODE	1N4148M
D1311	8-719-200-82	DIODE	11ES2
D1312	8-719-001-43	DIODE	UZL-11M1
D1321	8-719-200-82	DIODE	11ES2
D1322	8-719-200-82	DIODE	11ES2
D1323	8-719-011-05	DIODE	UZ-27BS
D1331	8-719-200-82	DIODE	11ES2
D1332	8-719-200-82	DIODE	11ES2
D1333	8-719-200-82	DIODE	11ES2
D1334	8-719-200-82	DIODE	11ES2
D1341	8-719-987-63	DIODE	1N4148M
D1361	8-719-200-82	DIODE	11ES2
D1362	8-719-200-82	DIODE	11ES2
D1364	8-719-200-82	DIODE	11ES2
D1365	8-719-200-82	DIODE	11ES2
D1366	8-719-024-99	DIODE	11ES2-NTA2B
D1367	8-719-024-99	DIODE	11ES2-NTA2B
D1381	8-719-987-63	DIODE	1N4148M
D1382	8-719-987-63	DIODE	1N4148M
D1391	8-719-987-63	DIODE	1N4148M
D1701	8-719-024-98	DIODE	11EQS04-NTA1B
D1702	8-719-987-63	DIODE	1N4148M
D1851	8-719-200-82	DIODE	11ES2
D1852	8-719-987-63	DIODE	1N4148M
D1853	8-719-987-63	DIODE	1N4148M
D1901	8-719-010-33	DIODE	UZ-4.7BSB

< FRONTEND >

FE1	1-693-090-51	FRONT END (FM) (2 GANG) (E, MX, AR, AUS, PX)
FE1	1-693-217-11	FRONT END (4 GANG) (AEP, G, IT)

< IC >

IC1	8-759-200-60	IC	TA7060AP (AEP, G, IT)
IC2	8-759-200-60	IC	TA7060AP (AEP, G, IT)
IC3	8-759-176-03	IC	LA1835
IC51	8-759-288-54	IC	LC72130
IC903	8-759-289-38	IC	HA12195NT (AEP, G, IT)
IC903	8-759-289-39	IC	HA12196NT (E, MX, AR, AUS, PX)
IC904	8-759-111-44	IC	uPC4570C-1
IC905	8-759-111-44	IC	uPC4570C-1
IC906	8-759-143-54	IC	uPC1330HA
IC1001	8-759-634-51	IC	M5218AP
IC1002	8-759-000-48	IC	MC14052BCP
IC1101	8-759-291-98	IC	M62423FP
IC1131	8-759-281-42	IC	TC9210P
IC1202	8-759-111-68	IC	uPC1237HA
IC1341	8-759-820-13	IC	L78MR06
IC1351	8-759-288-53	IC	LA5617
IC1381	8-759-802-22	IC	L780S10
IC1391	8-759-604-86	IC	M5F7807
IC1501	8-759-333-93	IC	TMP87CP64F-6254
IC1502	8-759-917-18	IC	SN74HCU04AN
IC1502	8-759-281-75	IC	PC74HCU04N

MAIN

Ref.No.	Part No.	Description	Remark
IC1502	8-759-267-92	IC SN74HC04ANS	
IC1502	8-759-269-92	IC SN74HCU04ANS-E20	
IC1901	8-759-822-09	IC LB1641	
		< IFT >	
IFT1	1-409-636-11	TRANSFORMER, IF(CERAMIC FILTER)	
		< JACK >	
* J1001	1-580-691-11	JACK, PIN 2P (PHONO IN)	
		< COIL >	
L1	1-407-500-00	INDUCTOR 4.7mH (AEP)	
L1	1-410-688-31	INDUCTOR 1.5mH (E, G, IT, MX, AR, AUS, PX)	
L2	1-410-336-11	INDUCTOR 220uH (AEP)	
L31	1-414-142-11	INDUCTOR 1uH (AEP, G, IT)	
L701	1-410-780-11	INDUCTOR 27mH	
L801	1-410-780-11	INDUCTOR 27mH	
L901	1-414-223-11	INDUCTOR 470uH	
L1201	1-420-872-00	COIL, AIR-CORE	
L1251	1-420-872-00	COIL, AIR-CORE	
L1851	1-410-521-11	INDUCTOR 100uH	
L1852	1-410-521-11	INDUCTOR 100uH	
		< FILTER >	
LPF1	1-239-597-11	FILTER, LOW PASS (AEP, G, IT)	
LPF2	1-239-597-11	FILTER, LOW PASS (AEP, G, IT)	
		< TRANSISTOR >	
Q1	8-729-230-99	TRANSISTOR 2SC2669-OY (E, MX, AR, AUS, PX)	
Q2	8-729-230-99	TRANSISTOR 2SC2669-OY (E, MX, AR, AUS, PX)	
Q3	8-729-230-99	TRANSISTOR 2SC2669-OY (E, MX, AR, AUS, PX)	
Q4	8-729-230-99	TRANSISTOR 2SC2669-OY (E, MX, AR, AUS, PX)	
Q5	8-729-422-57	TRANSISTOR UN4111	
Q6	8-729-119-76	TRANSISTOR 2SA1175-HFE (AEP)	
Q7	8-729-119-76	TRANSISTOR 2SA1175-HFE (AEP)	
Q8	8-729-900-80	TRANSISTOR DTC114ES (AEP)	
Q9	8-729-900-80	TRANSISTOR DTC114ES (AEP)	
Q10	8-729-900-80	TRANSISTOR DTC114ES (AEP)	
Q11	8-729-900-80	TRANSISTOR DTC114ES (AEP)	
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q901	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q902	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q903	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q904	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q906	8-729-900-89	TRANSISTOR DTC144ES	
Q909	8-729-900-65	TRANSISTOR DTA144ES	
Q1001	8-729-900-80	TRANSISTOR DTC114ES	
Q1002	8-729-900-80	TRANSISTOR DTC114ES	
Q1101	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1131	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1151	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1181	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1204	8-729-900-63	TRANSISTOR DTA124ES	
Q1205	8-729-900-80	TRANSISTOR DTC114ES	
Q1206	8-729-900-80	TRANSISTOR DTC114ES	
Q1301	8-729-116-83	TRANSISTOR 2SD1616-K (AEP, G, IT)	
Q1301	8-729-209-15	TRANSISTOR 2SD2012	
Q1302	8-729-116-83	TRANSISTOR 2SD1616-K (AEP, G, IT)	
Q1303	8-729-900-80	TRANSISTOR DTC114ES	
Q1321	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q1361	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q1362	8-729-900-80	TRANSISTOR DTC114ES	
Q1363	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q1364	8-729-900-80	TRANSISTOR DTC114ES	
Q1851	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		< RESISTOR >	
R1	1-249-411-11	CARBON 330 5% 1/4W (AEP, IT, G)	
R2	1-249-411-11	CARBON 330 5% 1/4W (AEP, IT, G)	
R4	1-249-401-11	CARBON 47 5% 1/4W F	
R5	1-249-411-11	CARBON 330 5% 1/4W	
R6	1-247-863-91	CARBON 22K 5% 1/4W	
R7	1-249-411-11	CARBON 330 5% 1/4W	
R8	1-249-411-11	CARBON 330 5% 1/4W (E, MX, AR, AUS, PX)	
R9	1-247-863-91	CARBON 22K 5% 1/4W	
R10	1-249-411-11	CARBON 330 5% 1/4W	
R11	1-247-863-91	CARBON 22K 5% 1/4W	
R12	1-249-411-11	CARBON 330 5% 1/4W	
R13	1-249-411-11	CARBON 330 5% 1/4W (E, MX, AR, AUS, PX)	
R14	1-247-863-91	CARBON 22K 5% 1/4W	
R15	1-249-405-11	CARBON 100 5% 1/4W F	
R16	1-249-442-11	CARBON 510 5% 1/4W	
R17	1-249-403-61	CARBON 68 5% 1/4W F	
R18	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R19	1-249-441-11	CARBON 100K 5% 1/4W	
R20	1-249-429-11	CARBON 10K 5% 1/4W	
R21	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R22	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R23	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R24	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R25	1-249-429-11	CARBON 10K 5% 1/4W	
R26	1-249-429-11	CARBON 10K 5% 1/4W (AEP)	
R27	1-249-437-11	CARBON 47K 5% 1/4W	
R40	1-249-399-11	CARBON 33 5% 1/4W F	
R41	1-249-429-11	CARBON 10K 5% 1/4W (AEP)	
R42	1-249-429-11	CARBON 10K 5% 1/4W (AEP)	

Ref.No.	Part No.	Description	Remark
R43	1-249-441-11	CARBON 100K 5% 1/4W	
R44	1-249-425-11	CARBON 4.7K 5% 1/4W F	(AEP)
R45	1-249-437-11	CARBON 47K 5% 1/4W	
R46	1-247-903-00	CARBON 1M 5% 1/4W	(AEP)
R47	1-247-863-91	CARBON 22K 5% 1/4W	(AEP)
R48	1-249-437-11	CARBON 47K 5% 1/4W	(AEP)
R50	1-249-401-11	CARBON 47 5% 1/4W F	
R51	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R52	1-249-429-11	CARBON 10K 5% 1/4W	
R53	1-249-429-11	CARBON 10K 5% 1/4W	
R55	1-249-429-11	CARBON 10K 5% 1/4W	
R56	1-249-417-11	CARBON 1K 5% 1/4W F	(AEP)
R57	1-249-429-11	CARBON 10K 5% 1/4W	(AEP)
R58	1-249-417-11	CARBON 1K 5% 1/4W F	
R59	1-249-417-11	CARBON 1K 5% 1/4W F	
R60	1-249-405-11	CARBON 100 5% 1/4W F	
R61	1-249-423-11	CARBON 3.3K 5% 1/4W F	
R62	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R63	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R64	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R65	1-247-807-31	CARBON 100 5% 1/4W	
R66	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R71	1-249-423-11	CARBON 3.3K 5% 1/4W F	(AEP)
R72	1-247-863-91	CARBON 22K 5% 1/4W	(AEP)
R73	1-249-425-11	CARBON 4.7K 5% 1/4W F	(AEP)
R74	1-249-425-11	CARBON 4.7K 5% 1/4W F	(AEP)
R75	1-249-425-11	CARBON 4.7K 5% 1/4W F	(AEP)
R701	1-247-889-00	CARBON 270K 5% 1/4W	
R702	1-249-404-00	CARBON 82 5% 1/4W F	
R703	1-247-882-11	CARBON 130K 5% 1/4W	
R704	1-247-850-11	CARBON 6.2K 5% 1/4W	
R711	1-247-889-00	CARBON 270K 5% 1/4W	
R712	1-249-404-00	CARBON 82 5% 1/4W F	
R713	1-247-882-11	CARBON 130K 5% 1/4W	
R714	1-247-850-11	CARBON 6.2K 5% 1/4W	
R715	1-247-863-91	CARBON 22K 5% 1/4W	
R720	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R721	1-249-429-11	CARBON 10K 5% 1/4W	
R722	1-249-431-11	CARBON 15K 5% 1/4W	
R723	1-249-429-11	CARBON 10K 5% 1/4W	
R724	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R725	1-249-428-11	CARBON 8.2K 5% 1/4W F	
R726	1-249-420-11	CARBON 1.8K 5% 1/4W F	
R727	1-247-863-91	CARBON 22K 5% 1/4W	
R728	1-249-417-11	CARBON 1K 5% 1/4W F	
R731	1-249-430-11	CARBON 12K 5% 1/4W	
R801	1-247-889-00	CARBON 270K 5% 1/4W	
R802	1-249-404-00	CARBON 82 5% 1/4W F	
R803	1-247-882-11	CARBON 130K 5% 1/4W	
R804	1-247-850-11	CARBON 6.2K 5% 1/4W	
R811	1-247-889-00	CARBON 270K 5% 1/4W	
R812	1-249-404-00	CARBON 82 5% 1/4W F	
R813	1-247-882-11	CARBON 130K 5% 1/4W	
R814	1-247-850-11	CARBON 6.2K 5% 1/4W	
R815	1-247-863-91	CARBON 22K 5% 1/4W	
R820	1-249-425-11	CARBON 4.7K 5% 1/4W F	
R821	1-249-429-11	CARBON 10K 5% 1/4W	
R822	1-249-431-11	CARBON 15K 5% 1/4W	
R823	1-249-429-11	CARBON 10K 5% 1/4W	
R824	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R825	1-249-428-11	CARBON 8.2K 5% 1/4W F	
R826	1-249-420-11	CARBON 1.8K 5% 1/4W F	
R827	1-247-863-91	CARBON 22K 5% 1/4W	
R828	1-249-417-11	CARBON 1K 5% 1/4W F	
R831	1-249-430-11	CARBON 12K 5% 1/4W	
R903	1-249-413-11	CARBON 470 5% 1/4W F	
R904	1-249-413-11	CARBON 470 5% 1/4W F	
R905	1-249-413-11	CARBON 470 5% 1/4W F	
R906	1-249-413-11	CARBON 470 5% 1/4W F	
R910	1-249-429-11	CARBON 10K 5% 1/4W (AEP, G, IT)	
R911	1-215-451-00	METAL 18K 1% 1/4W (AEP, G, IT)	
R912	1-249-440-11	CARBON 82K 5% 1/4W	
R913	1-247-862-11	CARBON 20K 5% 1/4W	
R915	1-249-429-11	CARBON 10K 5% 1/4W	
R916	1-249-429-11	CARBON 10K 5% 1/4W	
R917	1-247-864-11	CARBON 24K 5% 1/4W	
R918	1-249-429-11	CARBON 10K 5% 1/4W	
R919	1-249-429-11	CARBON 10K 5% 1/4W	
R920	1-249-429-11	CARBON 10K 5% 1/4W	
R921	1-249-424-11	CARBON 3.9K 5% 1/4W F	
R922	1-249-389-11	CARBON 4.7 5% 1/4W F	
R923	1-249-434-11	CARBON 27K 5% 1/4W	
R924	1-249-434-11	CARBON 27K 5% 1/4W	
R925	1-249-429-11	CARBON 10K 5% 1/4W	
R926	1-249-389-11	CARBON 4.7 5% 1/4W F	
R931	1-215-905-11	METAL OXIDE 10 5% 3W F	
R932	1-249-426-11	CARBON 5.6K 5% 1/4W	
R933	1-249-442-11	CARBON 510 5% 1/4W	
R934	1-249-441-11	CARBON 100K 5% 1/4W	
R935	1-249-441-11	CARBON 100K 5% 1/4W	
R946	1-249-429-11	CARBON 10K 5% 1/4W	
R947	1-249-429-11	CARBON 10K 5% 1/4W	
R948	1-249-429-11	CARBON 10K 5% 1/4W	
R949	1-249-429-11	CARBON 10K 5% 1/4W (AEP, G, IT)	
R950	1-249-429-11	CARBON 10K 5% 1/4W	
R951	1-249-429-11	CARBON 10K 5% 1/4W	
R953	1-249-429-11	CARBON 10K 5% 1/4W (AEP, G, IT)	
R954	1-249-417-11	CARBON 1K 5% 1/4W F	
R955	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R958	1-249-417-11	CARBON 1K 5% 1/4W F	

Ref.No.	Part No.	Description				Remark
R1001	1-249-417-11	CARBON	1K	5%	1/4W	F (AEP, G, IT)
R1002	1-249-417-11	CARBON	1K	5%	1/4W	F
R1003	1-249-437-11	CARBON	47K	5%	1/4W	
R1004	1-247-835-11	CARBON	1.5K	5%	1/4W	(E, MX, AR, AUS, PX)
R1004	1-249-416-11	CARBON	820	5%	1/4W	F (AEP, G, IT)
R1005	1-247-897-11	CARBON	560K	5%	1/4W	
R1006	1-249-437-11	CARBON	47K	5%	1/4W	
R1007	1-249-409-11	CARBON	220	5%	1/4W	F
R1008	1-249-441-11	CARBON	100K	5%	1/4W	
R1009	1-249-409-11	CARBON	220	5%	1/4W	F (AEP, G, IT)
R1011	1-247-863-91	CARBON	22K	5%	1/4W	
R1012	1-247-863-91	CARBON	22K	5%	1/4W	
R1044	1-249-415-11	CARBON	680	5%	1/4W	F
R1046	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1047	1-249-417-11	CARBON	1K	5%	1/4W	F
R1048	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1049	1-249-441-11	CARBON	100K	5%	1/4W	
R1050	1-249-434-11	CARBON	27K	5%	1/4W	
R1051	1-249-417-11	CARBON	1K	5%	1/4W	F (AEP, G, IT)
R1052	1-249-417-11	CARBON	1K	5%	1/4W	F
R1053	1-249-437-11	CARBON	47K	5%	1/4W	
R1054	1-247-835-11	CARBON	1.5K	5%	1/4W	(E, MX, AR, AUS, PX)
R1054	1-249-416-11	CARBON	820	5%	1/4W	F (AEP, G, IT)
R1055	1-247-897-11	CARBON	560K	5%	1/4W	
R1056	1-249-437-11	CARBON	47K	5%	1/4W	
R1057	1-249-409-11	CARBON	220	5%	1/4W	F
R1058	1-249-441-11	CARBON	100K	5%	1/4W	
R1059	1-249-409-11	CARBON	220	5%	1/4W	F (AEP, G, IT)
R1094	1-249-415-11	CARBON	680	5%	1/4W	F
R1096	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1097	1-249-417-11	CARBON	1K	5%	1/4W	F
R1098	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1099	1-249-441-11	CARBON	100K	5%	1/4W	
R1100	1-249-434-11	CARBON	27K	5%	1/4W	
R1101	1-249-429-11	CARBON	10K	5%	1/4W	
R1102	1-247-863-91	CARBON	22K	5%	1/4W	
R1131	1-249-437-11	CARBON	47K	5%	1/4W	
R1132	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1133	1-249-429-11	CARBON	10K	5%	1/4W	
R1134	1-249-437-11	CARBON	47K	5%	1/4W	
R1135	1-249-417-11	CARBON	1K	5%	1/4W	F
R1136	1-249-417-11	CARBON	1K	5%	1/4W	F
R1151	1-249-429-11	CARBON	10K	5%	1/4W	
R1152	1-247-863-91	CARBON	22K	5%	1/4W	
R1181	1-249-437-11	CARBON	47K	5%	1/4W	
R1182	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1183	1-249-429-11	CARBON	10K	5%	1/4W	
R1184	1-249-437-11	CARBON	47K	5%	1/4W	
R1185	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1209	1-247-807-31	CARBON	100	5%	1/4W	
R1210	1-247-807-31	CARBON	100	5%	1/4W	
R1211	1-247-807-31	CARBON	100	5%	1/4W	
R1212	1-247-807-31	CARBON	100	5%	1/4W	
R1213	1-247-807-31	CARBON	100	5%	1/4W	
R1214	1-247-807-31	CARBON	100	5%	1/4W	
R1215	1-247-807-31	CARBON	100	5%	1/4W	
R1220	1-249-389-11	CARBON	4.7	5%	1/4W	F (AEP, G, IT)
R1221	1-249-389-11	CARBON	4.7	5%	1/4W	F (AEP, G, IT)
R1222	1-249-409-11	CARBON	220	5%	1/4W	F
R1223	1-249-409-11	CARBON	220	5%	1/4W	F
R1226	1-215-889-00	METAL OXIDE	330	5%	2W	F (AEP, G, IT)
R1226	1-215-890-11	METAL OXIDE	470	5%	2W	F (E, MX, AR, AUS, PX)
R1233	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1234	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1235	1-249-435-11	CARBON	33K	5%	1/4W	
R1236	1-249-441-11	CARBON	100K	5%	1/4W	
R1237	1-249-429-11	CARBON	10K	5%	1/4W	
R1240	1-249-438-11	CARBON	56K	5%	1/4W	
R1241	1-247-791-91	CARBON	22	5%	1/4W	
R1244	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1248	1-249-385-11	CARBON	2.2	5%	1/6W	F (AEP, G, IT)
R1249	1-249-385-11	CARBON	2.2	5%	1/6W	F (AEP, G, IT)
R1270	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1271	1-249-389-11	CARBON	4.7	5%	1/4W	F
R1272	1-249-409-11	CARBON	220	5%	1/4W	F
R1273	1-249-409-11	CARBON	220	5%	1/4W	F
R1290	1-249-437-11	CARBON	47K	5%	1/4W	
R1298	1-249-385-11	CARBON	2.2	5%	1/6W	F (AEP, G, IT)
R1299	1-249-385-11	CARBON	2.2	5%	1/6W	F (AEP, G, IT)
R1303	1-249-429-11	CARBON	10K	5%	1/4W	
R1304	1-249-429-11	CARBON	10K	5%	1/4W	
R1311	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R1312	1-249-381-11	CARBON	1	5%	1/4W	F (AEP, G, IT)
R1313	1-249-381-11	CARBON	1	5%	1/4W	F (AEP, G, IT)
R1316	1-249-393-11	CARBON	10	5%	1/4W	F

Ref.No.	Part No.	Description				Remark
R1321	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1322	1-249-435-11	CARBON	33K	5%	1/4W	
R1341	1-249-417-11	CARBON	1K	5%	1/4W	F
R1342	1-249-429-11	CARBON	10K	5%	1/4W	
R1355	1-249-417-11	CARBON	1K	5%	1/4W	F
R1361	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1362	1-249-411-11	CARBON	330	5%	1/4W	
R1363	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1364	1-249-393-11	CARBON	10	5%	1/4W	F
R1371	1-249-429-11	CARBON	10K	5%	1/4W	(AEP2, E, MX)
R1515	1-247-863-91	CARBON	22K	5%	1/4W	
R1516	1-247-863-91	CARBON	22K	5%	1/4W	
R1525	1-247-863-91	CARBON	22K	5%	1/4W	
R1535	1-247-863-91	CARBON	22K	5%	1/4W	
R1536	1-247-863-91	CARBON	22K	5%	1/4W	
R1538	1-247-863-91	CARBON	22K	5%	1/4W	
R1539	1-247-863-91	CARBON	22K	5%	1/4W	
R1540	1-247-863-91	CARBON	22K	5%	1/4W	
R1544	1-247-863-91	CARBON	22K	5%	1/4W	
R1545	1-247-863-91	CARBON	22K	5%	1/4W	
R1546	1-247-863-91	CARBON	22K	5%	1/4W	
R1552	1-247-863-91	CARBON	22K	5%	1/4W	
R1554	1-247-863-91	CARBON	22K	5%	1/4W	
R1555	1-249-417-11	CARBON	1K	5%	1/4W	F
R1556	1-249-417-11	CARBON	1K	5%	1/4W	F
R1557	1-249-417-11	CARBON	1K	5%	1/4W	F
R1558	1-249-418-11	CARBON	1.2K	5%	1/4W	F
R1559	1-247-863-91	CARBON	22K	5%	1/4W	(E, MX, AR)
R1559	1-249-429-11	CARBON	10K	5%	1/4W	(AEP, G, IT)
R1559	1-249-431-11	CARBON	15K	5%	1/4W	(AUS, PX)
R1560	1-247-863-91	CARBON	22K	5%	1/4W	
R1561	1-247-863-91	CARBON	22K	5%	1/4W	
R1562	1-247-863-91	CARBON	22K	5%	1/4W	
R1563	1-247-863-91	CARBON	22K	5%	1/4W	
R1564	1-247-863-91	CARBON	22K	5%	1/4W	
R1565	1-247-863-91	CARBON	22K	5%	1/4W	
R1566	1-247-863-91	CARBON	22K	5%	1/4W	
R1567	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1568	1-247-863-91	CARBON	22K	5%	1/4W	
R1574	1-249-429-11	CARBON	10K	5%	1/4W	
R1575	1-249-429-11	CARBON	10K	5%	1/4W	
R1578	1-249-429-11	CARBON	10K	5%	1/4W	
R1580	1-249-429-11	CARBON	10K	5%	1/4W	
R1581	1-249-429-11	CARBON	10K	5%	1/4W	
R1592	1-249-429-11	CARBON	10K	5%	1/4W	
R1593	1-247-863-91	CARBON	22K	5%	1/4W	
R1594	1-247-863-91	CARBON	22K	5%	1/4W	
R1595	1-247-863-91	CARBON	22K	5%	1/4W	
R1596	1-247-863-91	CARBON	22K	5%	1/4W	
R1754	1-247-807-31	CARBON	100	5%	1/4W	
R1756	1-247-807-31	CARBON	100	5%	1/4W	
R1758	1-247-807-31	CARBON	100	5%	1/4W	
R1760	1-247-807-31	CARBON	100	5%	1/4W	
R1767	1-247-807-31	CARBON	100	5%	1/4W	
R1771	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R1772	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R1801	1-249-437-11	CARBON	47K	5%	1/4W	
R1802	1-249-437-11	CARBON	47K	5%	1/4W	
R1851	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R1852	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R1853	1-249-423-11	CARBON	3.3K	5%	1/4W	F
R1858	1-249-431-11	CARBON	15K	5%	1/4W	
R1859	1-247-863-91	CARBON	22K	5%	1/4W	(AEP)
R1859	1-249-429-11	CARBON	10K	5%	1/4W	(E, G, IT, MX, AR, AUS, PX)
R1867	1-249-441-11	CARBON	100K	5%	1/4W	

< COMPOSITION CIRCUIT BLOCK >

RB1	1-239-260-11	ENCAPSULATED COMPONENT	(E, G, IT, MX, AR, AUS, PX)
RB1	1-239-876-11	ENCAPSULATED COMPONENT	(AEP)
RB2	1-236-463-11	ENCAPSULATED COMPONENT	(AEP)

< VARIABLE RESISTOR >

RV1	1-238-601-11	RES, ADJ, CARBON	22K
RV2	1-238-601-11	RES, ADJ, CARBON	22K
RV701	1-238-600-11	RES, ADJ, CARBON	10K
RV702	1-238-600-11	RES, ADJ, CARBON	10K
RV703	1-238-600-11	RES, ADJ, CARBON	10K
RV704	1-238-603-11	RES, ADJ, CARBON	100K
RV801	1-238-600-11	RES, ADJ, CARBON	10K
RV802	1-238-600-11	RES, ADJ, CARBON	10K
RV803	1-238-600-11	RES, ADJ, CARBON	10K
RV804	1-238-603-11	RES, ADJ, CARBON	100K
RV901	1-238-598-11	RES, ADJ, CARBON	2.2K
RV902	1-238-598-11	RES, ADJ, CARBON	2.2K

< RELAY >

RY1201	1-515-920-11	RELAY (24V)

< TRANSFORMER >

T901	1-433-349-11	TRANSFORMER, BIAS OSCILLATION

< TERMINAL >

TM1	1-537-238-21	TERMINAL BOARD (ANTENNA)	(E, MX, AR, AUS, PX)
TM1	1-537-488-11	TERMINAL BOARD (ANTENNA)	(ANT) (AEP, G, IT)
TM1201	1-537-801-11	TERMINAL BOARD (SPEAKER)	
TM1202	1-537-240-31	TERMINAL BOARD (SURROUND SPEAKER)	(E, MX, AR, AUS, PX)

MAIN | OPEN/CLOSE | PANEL

Ref. No.	Part No.	Description				Remark
		< VIBRATOR >				
X1851	1-579-952-21	VIBRATOR, CERAMIC (8MHz)				
X1852	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)				
		< VIBRATOR >				
XT51	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz)				
**********						
*	1-654-611-11	OPEN/CLOSE BOARD				
		**********				
		< RESISTOR >				
R640	1-249-408-11	CARBON	180	5%	1/4W	F
R641	1-249-409-11	CARBON	220	5%	1/4W	F
R642	1-249-411-11	CARBON	330	5%	1/4W	
		< SWITCH >				
S631	1-554-303-21	SWITCH, TACTILE (OPEN/CLOSE)				
S633	1-554-303-21	SWITCH, TACTILE (PLAY MODE)				
S634	1-554-303-21	SWITCH, TACTILE (REPEAT)				
**********						
*	A-4371-937-A	PANEL BOARD, COMPLETE (E, MX, AR, AUS, PX)				
		**********				
*	A-4371-962-A	PANEL BOARD, COMPLETE (AEP, G, IT)				
		**********				
*	4-949-935-21	CUSHION (FL)				
*	4-970-711-01	HOLDER, FL TUBE				
		< CAPACITOR >				
C601	1-126-177-11	ELECT	100uF	20%	10V	
C602	1-162-282-31	CERAMIC	100PF	10%	50V	
C603	1-126-177-11	ELECT	100uF	20%	10V	
C604	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C605	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C606	1-126-177-11	ELECT	100uF	20%	10V	
C607	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C609	1-126-177-11	ELECT	100uF	20%	10V	
C651	1-126-301-11	ELECT	1uF	20%	50V	
C652	1-126-301-11	ELECT	1uF	20%	50V	
C671	1-164-159-11	CERAMIC	0.1uF		50V	
C675	1-126-949-11	ELECT	220uF	20%	35V	
		< CONNECTOR >				
* CN601	1-568-832-11	SOCKET, CONNECTOR 13P				
CN601	1-750-418-11	CONNECTOR, FFC/FPC 13P				

Ref. No.	Part No.	Description				Remark
		< DIODE >				
D600	8-719-987-63	DIODE 1N4148M				
D601	8-719-987-63	DIODE 1N4148M				
D605	8-719-046-46	DIODE SEL5221S-TH8F (P-FILE)				
D606	8-719-046-46	DIODE SEL5221S-TH8F (DANCE/5)				
D607	8-719-046-46	DIODE SEL5221S-TH8F (CLASSIC/4)				
D608	8-719-046-46	DIODE SEL5221S-TH8F (JAZZ/3)				
D609	8-719-046-46	DIODE SEL5221S-TH8F (POPS/2)				
D610	8-719-046-46	DIODE SEL5221S-TH8F (ROCK/1)				
D614	8-719-046-35	DIODE SEL5921A-TH8F (TUNER/BAND)				
D615	8-719-046-35	DIODE SEL5921A-TH8F (PHONO)				
D629	8-719-011-40	DIODE UZ-2.7BSA-TA				
D630	8-719-011-40	DIODE UZ-2.7BSA-TA				
		< FLUORESCENT INDICATOR >				
FL601	1-517-364-11	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC602	8-749-923-43	IC GP1U57XB				
IC608	8-752-862-43	IC CXP82612-006Q				
		< COIL >				
L671	1-410-521-11	INDUCTOR 100uH				
L672	1-410-521-11	INDUCTOR 100uH				
		< TRANSISTOR >				
Q603	8-729-900-63	TRANSISTOR DTA124ES				
Q604	8-729-900-63	TRANSISTOR DTA124ES				
Q605	8-729-900-63	TRANSISTOR DTA124ES				
Q614	8-729-900-63	TRANSISTOR DTA124ES				
Q615	8-729-900-63	TRANSISTOR DTA124ES				
		< RESISTOR >				
R403	1-247-863-91	CARBON	22K	5%	1/4W	
R404	1-247-863-91	CARBON	22K	5%	1/4W	
R410	1-247-863-91	CARBON	22K	5%	1/4W	
R411	1-247-863-91	CARBON	22K	5%	1/4W	
R412	1-247-863-91	CARBON	22K	5%	1/4W	
R413	1-247-863-91	CARBON	22K	5%	1/4W	
R473	1-247-863-91	CARBON	22K	5%	1/4W	
R474	1-247-863-91	CARBON	22K	5%	1/4W	
R478	1-247-863-91	CARBON	22K	5%	1/4W	
R479	1-247-863-91	CARBON	22K	5%	1/4W	
R609	1-247-863-91	CARBON	22K	5%	1/4W	
R610	1-247-863-91	CARBON	22K	5%	1/4W	
R611	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R612	1-247-811-31	CARBON	150	5%	1/4W	
R613	1-249-410-11	CARBON	270	5%	1/4W	F
R614	1-249-408-11	CARBON	180	5%	1/4W	F

PANEL | POWER AMP

Ref. No.	Part No.	Description				Remark
R615	1-249-409-11	CARBON	220	5%	1/4W	F
R616	1-249-411-11	CARBON	330	5%	1/4W	
R624	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R625	1-247-811-31	CARBON	150	5%	1/4W	
R626	1-249-410-11	CARBON	270	5%	1/4W	F
R627	1-249-408-11	CARBON	180	5%	1/4W	F
R628	1-249-409-11	CARBON	220	5%	1/4W	F
R629	1-249-411-11	CARBON	330	5%	1/4W	
R630	1-249-413-11	CARBON	470	5%	1/4W	F
R631	1-249-414-11	CARBON	560	5%	1/4W	F
R632	1-249-416-11	CARBON	820	5%	1/4W	F
R637	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R650	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R651	1-247-811-31	CARBON	150	5%	1/4W	
R652	1-249-410-11	CARBON	270	5%	1/4W	F
R653	1-249-408-11	CARBON	180	5%	1/4W	F
R654	1-249-409-11	CARBON	220	5%	1/4W	F
R655	1-249-411-11	CARBON	330	5%	1/4W	
R656	1-249-413-11	CARBON	470	5%	1/4W	F
R657	1-249-414-11	CARBON	560	5%	1/4W	F
R658	1-249-416-11	CARBON	820	5%	1/4W	F
R663	1-247-903-00	CARBON	1M	5%	1/4W	
R664	1-247-807-31	CARBON	100	5%	1/4W	
R665	1-247-807-31	CARBON	100	5%	1/4W	
R666	1-247-807-31	CARBON	100	5%	1/4W	
R667	1-247-807-31	CARBON	100	5%	1/4W	
R668	1-247-807-31	CARBON	100	5%	1/4W	
R669	1-247-807-31	CARBON	100	5%	1/4W	
R673	1-249-411-11	CARBON	330	5%	1/4W	
R674	1-249-411-11	CARBON	330	5%	1/4W	
R675	1-249-411-11	CARBON	330	5%	1/4W	
R676	1-249-411-11	CARBON	330	5%	1/4W	
R677	1-249-411-11	CARBON	330	5%	1/4W	
R678	1-249-411-11	CARBON	330	5%	1/4W	
R680	1-249-411-11	CARBON	330	5%	1/4W	
R681	1-249-411-11	CARBON	330	5%	1/4W	
R687	1-247-807-31	CARBON	100	5%	1/4W	
R688	1-247-807-31	CARBON	100	5%	1/4W	
R689	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R690	1-247-807-31	CARBON	100	5%	1/4W	
R692	1-247-807-31	CARBON	100	5%	1/4W	
R693	1-249-429-11	CARBON	10K	5%	1/4W	
R699	1-247-863-91	CARBON	22K	5%	1/4W	
		< VARIABLE RESISTOR >				
RV601	1-467-869-11	ENCODER, ROTARY				
		< SWITCH >				
S603	1-554-303-21	SWITCH, TACTILE (▲)				
S604	1-554-303-21	SWITCH, TACTILE (▼)				

Ref. No.	Part No.	Description				Remark
S605	1-554-303-21	SWITCH, TACTILE (DBFB)				
S606	1-554-303-21	SWITCH, TACTILE (SURROUND)				
S607	1-554-303-21	SWITCH, TACTILE (PHONO)				
S616	1-554-303-21	SWITCH, TACTILE (◀)				
S617	1-554-303-21	SWITCH, TACTILE (▶)				
S618	1-554-303-21	SWITCH, TACTILE (TUNER/BAND)				
S619	1-554-303-21	SWITCH, TACTILE (TUNING -)				
S620	1-554-303-21	SWITCH, TACTILE (TUNING +)				
S621	1-554-303-21	SWITCH, TACTILE (TUNING MODE)				
S622	1-554-303-21	SWITCH, TACTILE (TUNING MEMORY)				
S623	1-554-303-21	SWITCH, TACTILE (DISPLAY)				
S644	1-554-303-21	SWITCH, TACTILE (ROCK/1)				
S645	1-554-303-21	SWITCH, TACTILE (POPS/2)				
S646	1-554-303-21	SWITCH, TACTILE (JAZZ/3)				
S647	1-554-303-21	SWITCH, TACTILE (CLASSIC/4)				
S648	1-554-303-21	SWITCH, TACTILE (DANCE/5)				
S649	1-554-303-21	SWITCH, TACTILE (EQ MEMORY)				
S650	1-554-303-21	SWITCH, TACTILE (P-FILE)				
		< VIBRATOR >				
X601	1-567-819-11	VIBRATOR, CERAMIC (4MHz)				
**********						
*	A-4371-959-A	POWER AMP BOARD, COMPLETE				
		**********				(E, MX, AR, AUS, PX)
*	A-4371-977-A	POWER AMP BOARD, COMPLETE (AEP, G, IT)				
		**********				
	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P BOARD (AUS)				
		< CAPACITOR >				
C1201	1-124-927-11	ELECT	4.7uF	20%	100V	
C1202	1-164-081-11	CERAMIC	470PF	10%	50V	
C1203	1-164-077-11	CERAMIC	220PF	10%	50V	
C1204	1-124-126-00	ELECT	47uF	20%	10V	(AEP, G, IT)
C1204	1-126-233-11	ELECT	22uF	20%	50V	(E, MX, AR, AUS, PX)
C1205	1-124-910-11	ELECT	47uF	20%	50V	
C1206	1-124-122-11	ELECT	100uF	20%	50V	
C1208	1-124-916-11	ELECT	22uF	20%	63V	
C1210	1-137-375-11	FILM	0.068uF	5%	50V	
C1211	1-137-375-11	FILM	0.068uF	5%	50V	
C1220	1-124-443-00	ELECT	100uF	20%	10V	
C1226	1-164-097-11	CERAMIC	0.022uF		50V	(AEP, G, IT)
C1227	1-164-159-11	CERAMIC	0.1uF		50V	
C1228	1-164-159-11	CERAMIC	0.1uF		50V	
C1251	1-124-927-11	ELECT	4.7uF	20%	100V	

Ref.No.	Part No.	Description				Remark
C1252	1-164-081-11	CERAMIC	470PF	10%	50V	
C1253	1-164-077-11	CERAMIC	220PF	10%	50V	
C1254	1-124-126-00	ELECT	47uF	20%	10V	(AEP, G, IT)
C1254	1-126-233-11	ELECT	22uF	20%	50V	(E, MX, AR, AUS, PX)
C1255	1-124-910-11	ELECT	47uF	20%	50V	
C1256	1-124-122-11	ELECT	100uF	20%	50V	
C1260	1-137-375-11	FILM	0.068uF	5%	50V	
C1261	1-137-375-11	FILM	0.068uF	5%	50V	
		< CONNECTOR >				
CN1203	1-764-340-11	PIN, CONNECTOR (PCB) (L TYPE) 3P				
CN1204	1-764-331-11	PIN, CONNECTOR (PCB) (V TYPE) 8P				
		< DIODE >				
D1201	8-719-987-63	DIODE 1N4148M				
D1202	8-719-987-63	DIODE 1N4148M				
D1251	8-719-987-63	DIODE 1N4148M				
		< IC >				
IC1201	8-749-920-09	IC STK-4152MK2K (E, MX, AR, AUS, PX)				
IC1201	8-749-920-13	IC STK-4132MK2 (AEP, G, IT)				
		< TRANSISTOR >				
Q1201	8-729-116-83	TRANSISTOR 2SD1616-K				
Q1251	8-729-116-83	TRANSISTOR 2SD1616-K				
		< RESISTOR >				
R1201	1-249-417-11	CARBON	1K	5%	1/4W	F
R1202	1-249-438-11	CARBON	56K	5%	1/4W	
R1203	1-247-827-11	CARBON	680	5%	1/4W	(E, MX, AR, AUS, PX)
R1203	1-249-414-11	CARBON	560	5%	1/4W	F (AEP, G, IT)
R1204	1-247-871-11	CARBON	47K	5%	1/4W	(E, MX, AR, AUS, PX)
R1204	1-249-438-11	CARBON	56K	5%	1/4W	(AEP, G, IT)
R1205	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1206	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1207	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1208	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R1209	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R1210	1-208-602-11	WIREWOUND	0.22	10%	2W	F
R1211	1-249-417-11	CARBON	1K	5%	1/4W	F
R1212	1-249-431-11	CARBON	15K	5%	1/4W	
R1213	1-249-441-11	CARBON	100K	5%	1/4W	
R1214	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1215	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1216	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1217	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R1218	1-247-791-91	CARBON	22	5%	1/4W	
R1219	1-247-791-91	CARBON	22	5%	1/4W	
R1227	1-247-863-91	CARBON	22K	5%	1/4W	(E, MX, AR, AUS, PX)
R1227	1-249-431-11	CARBON	15K	5%	1/4W	(AEP, G, IT)
R1228	1-247-881-00	CARBON	120K	5%	1/4W	(E, MX, AR, AUS, PX)
R1228	1-249-441-11	CARBON	100K	5%	1/4W	(AEP, G, IT)
R1229	1-249-429-11	CARBON	10K	5%	1/4W	
R1230	1-249-429-11	CARBON	10K	5%	1/4W	(E, MX, AR, AUS, PX)
R1230	1-249-431-11	CARBON	15K	5%	1/4W	(AEP, G, IT)
⚠R1243	1-249-383-11	CARBON	1.5	5%	1/6W	F
R1251	1-249-417-11	CARBON	1K	5%	1/4W	F
R1252	1-249-438-11	CARBON	56K	5%	1/4W	
R1253	1-247-827-11	CARBON	680	5%	1/4W	(E, MX, AR, AUS, PX)
R1253	1-249-414-11	CARBON	560	5%	1/4W	F (AEP, G, IT)
R1254	1-247-871-11	CARBON	47K	5%	1/4W	(E, MX, AR, AUS, PX)
R1254	1-249-438-11	CARBON	56K	5%	1/4W	(AEP, G, IT)
R1255	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1256	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1257	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R1258	1-249-425-11	CARBON	4.7K	5%	1/4W	F
⚠R1259	1-212-881-11	FUSIBLE	100	5%	1/4W	F
⚠R1260	1-208-602-11	WIREWOUND	0.22	10%	2W	F
R1261	1-249-417-11	CARBON	1K	5%	1/4W	F
R1262	1-249-431-11	CARBON	15K	5%	1/4W	
R1263	1-249-441-11	CARBON	100K	5%	1/4W	
R1268	1-247-791-91	CARBON	22	5%	1/4W	
R1269	1-247-791-91	CARBON	22	5%	1/4W	
*	1-654-616-11	POWER (A) BOARD				
		< CONNECTOR >				
* CN1951	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P (AUS)				
* CN1951	1-580-230-31	PIN, CONNECTOR (PC BOARD) 2P				(AEP, E, G, IT, MX, AR, PX)
CN1952	1-535-139-00	BASE POST 14MM (10MM PITCH) 2P (E, AR, PX)				
CN1953	1-535-139-00	BASE POST 14MM (10MM PITCH) 2P (E, AR, PX)				

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description				Remark
*	1-654-617-11	POWER (B) BOARD				
	1-533-217-31	HOLDER, FUSE				
		< CAPACITOR >				
C1951	1-164-159-11	CERAMIC	0.1uF		50V	
C1952	1-164-159-11	CERAMIC	0.1uF		50V	
		< FUSE >				
⚠F1901	1-532-350-00	FUSE, TIME LUG (T4A/125V)				
⚠F1902	1-532-350-00	FUSE, TIME LUG (T4A/125V)				
		< RESISTOR >				
⚠R1901	1-217-637-00	FUSIBLE	1	5%	1/4W	F
⚠R1902	1-219-122-91	FUSIBLE	0.33	5%	1/4W	F
⚠R1903	1-219-122-91	FUSIBLE	0.33	5%	1/4W	F
*	1-654-610-11	STANDBY BOARD				
		< RESISTOR >				
R633	1-249-418-11	CARBON	1.2K	5%	1/4W	F
		< SWITCH >				
S624	1-554-303-21	SWITCH, TACTILE (ENTER/NEXT)				
S625	1-554-303-21	SWITCH, TACTILE (SET)				
S642	1-554-303-21	SWITCH, TACTILE (SYSTEM POWER)				
*	1-654-614-11	SW BOARD				
		< CAPACITOR >				
C935	1-164-159-11	CERAMIC	0.1uF		50V	
C936	1-164-159-11	CERAMIC	0.1uF		50V	
C937	1-164-159-11	CERAMIC	0.1uF		50V	(AEP, G, IT)
		< CONNECTOR >				
CN951	1-506-468-11	PIN, CONNECTOR 3P (E, MX, AR, AUS, PX)				
CN951	1-506-469-11	PIN, CONNECTOR 4P (AEP, G, IT)				
		< RESISTOR >				
R959	1-249-417-11	CARBON	1K	5%	1/4W	F (AEP, G, IT)
		< SWITCH >				
S951	1-692-785-21	SWITCH, PUSH (3 KEY) (AEP, G, IT)				
S951	1-692-786-11	SWITCH, PUSH (2 KEY) (E, MX, AR, AUS, PX)				
*	1-654-609-11	TAPE FUNCTION BOARD				
		< DIODE >				
D603	8-719-046-35	DIODE SEL5921A-TH8F (TAPE)				
D604	8-719-046-35	DIODE SEL5921A-TH8F (CD)				
D611	8-719-046-35	DIODE SEL5921A-TH8F (▮▮ (CD))				
D612	8-719-046-42	DIODE SEL5421E-TH8F (▷ (CD))				
		< RESISTOR >				
R617	1-249-413-11	CARBON	470	5%	1/4W	F
R618	1-249-414-11	CARBON	560	5%	1/4W	F
R619	1-249-416-11	CARBON	820	5%	1/4W	F
R638	1-247-811-31	CARBON	150	5%	1/4W	
R639	1-249-410-11	CARBON	270	5%	1/4W	F
		< SWITCH >				
S608	1-554-303-21	SWITCH, TACTILE (▮▮)				
S609	1-554-303-21	SWITCH, TACTILE (■)				
S610	1-554-303-21	SWITCH, TACTILE (▶▶)				
S611	1-554-303-21	SWITCH, TACTILE (◀◀)				
S629	1-554-303-21	SWITCH, TACTILE (TAPE)				
S630	1-554-303-21	SWITCH, TACTILE (CD)				
		MISCELLANEOUS				
⚠5	1-570-046-21	SWITCH, VOLTAGE CHANGE (E, AR, PX)				
⚠9	1-569-007-11	ADAPTER, CONVERSION 2P (PX)				
101	1-769-304-11	WIRE (FLAT TYPE) (19 CORE)				
103	1-690-590-31	WIRE, FLAT TYPE (13 CORE)				
160	1-452-538-11	MAGNET				
⚠201	8-848-387-01	OPTICAL PICK-UP BLOCK (KSS-213BA/S-N)				
202	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)				
* CN415	1-568-942-11	PIN, CONNECTOR 4P				
* CN416	1-568-943-11	PIN, CONNECTOR 5P				
⚠CNP901	1-558-943-41	CORD, POWER (E, MX, PX)				
⚠CNP901	1-575-651-21	CORD, POWER (AEP, G, IT, AR)				
⚠CNP901	1-696-845-11	CORD, POWER (AUS)				
FL601	1-517-364-11	INDICATOR TUBE, FLUORESCENT				
⚠F1901	1-532-350-00	FUSE, TIME LUG (T4A/125V)				
⚠F1902	1-532-350-00	FUSE, TIME LUG (T4A/125V)				
HE901	1-543-673-11	HEAD, MAGNETIC (ERASE) (DECK B)				
HP901	1-543-319-11	HEAD, MAGNETIC (PB) (DECK A)				
HRP901	1-543-319-11	HEAD, MAGNETIC (REC/PB) (DECK B)				
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)				

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description	Remark
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M151	A-4604-363-A	MOTOR (L) ASSY (LOADING)	
M901	X-3362-377-1	MOTOR (WH) ASSY (REEL/CAPSTAN)	
S1	1-571-736-11	SWITCH, LEAF (MOTOR B)	
S2	1-571-736-11	SWITCH, LEAF (PLAY B)	
S3	1-571-736-11	SWITCH, LEAF (REC B)	
S4	1-571-736-11	SWITCH, LEAF (MOTOR A)	
S5	1-571-736-11	SWITCH, LEAF (PLAY A)	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
⚠T901	1-427-687-11	TRANSFORMER, POWER (AEP, G, IT)	
⚠T901	1-427-688-11	TRANSFORMER, POWER (E, MX, AR, AUS, PX)	
		**********	
		ACCESSORIES & PACKING MATERIALS	
		**********	
	1-467-988-11	COMMANDER, STANDARD (RM-S200L)	
	1-501-374-11	ANTENNA, LOOP (AEP, G, IT)	
	1-501-594-31	ANTENNA (FM) (AEP, G, IT)	
	3-798-004-31	MANUAL, INSTRUCTION (DANISH, FINNISH, SWEDISH) (AEP)	
	3-798-004-41	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP)	
	3-798-004-51	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN) (AEP, G, IT)	
	3-798-004-61	MANUAL, INSTRUCTION (DANISH, FINNISH, SWEDISH) (AEP, G, IT)	
	3-798-004-71	MANUAL, INSTRUCTION (SPANISH) (MX)	
	3-798-004-81	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (AUS, PX, E, AR)	
*	4-941-762-01	COVER, BATTERY (FOR RM-S200L)	
*	4-971-005-01	INDIVIDUAL CARTON (AEP, G, IT) (Made in Indonesia)	
*	4-971-010-01	CUSHION	
*	4-975-146-01	INDIVIDUAL CARTON (AEP) (Made in Malaysia)	
		**********	

Ref.No.	Part No.	Description	Remark
		**********	
		HARDWARE LIST	
		**********	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
#3	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	(E, MX, AR, AUS, PX)
#4	7-621-849-00	SCREW, TAPPING	
#5	7-685-650-79	SCREW +BVTP 3X16 TYPE2 N-S	
#6	7-682-560-04	SCREW +BVTT 4X6 (S)	
#7	7-621-775-10	SCREW +B 2.6X4	
#8	7-621-255-15	SCREW +P 2X3	
#9	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
#10	7-685-133-19	SCREW +P 2.6X6 TYPE2	
#11	7-621-775-20	SCREW +B 2.6X5	
#12	7-623-921-01	RING, RETAINING, CAPSTAN	
#13	7-688-001-01	W2, SMALL	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-959-983-11

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Home A&V Products Div.

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Quality Engineering Dept.

HCD-N200

SONY.
SERVICE MANUAL

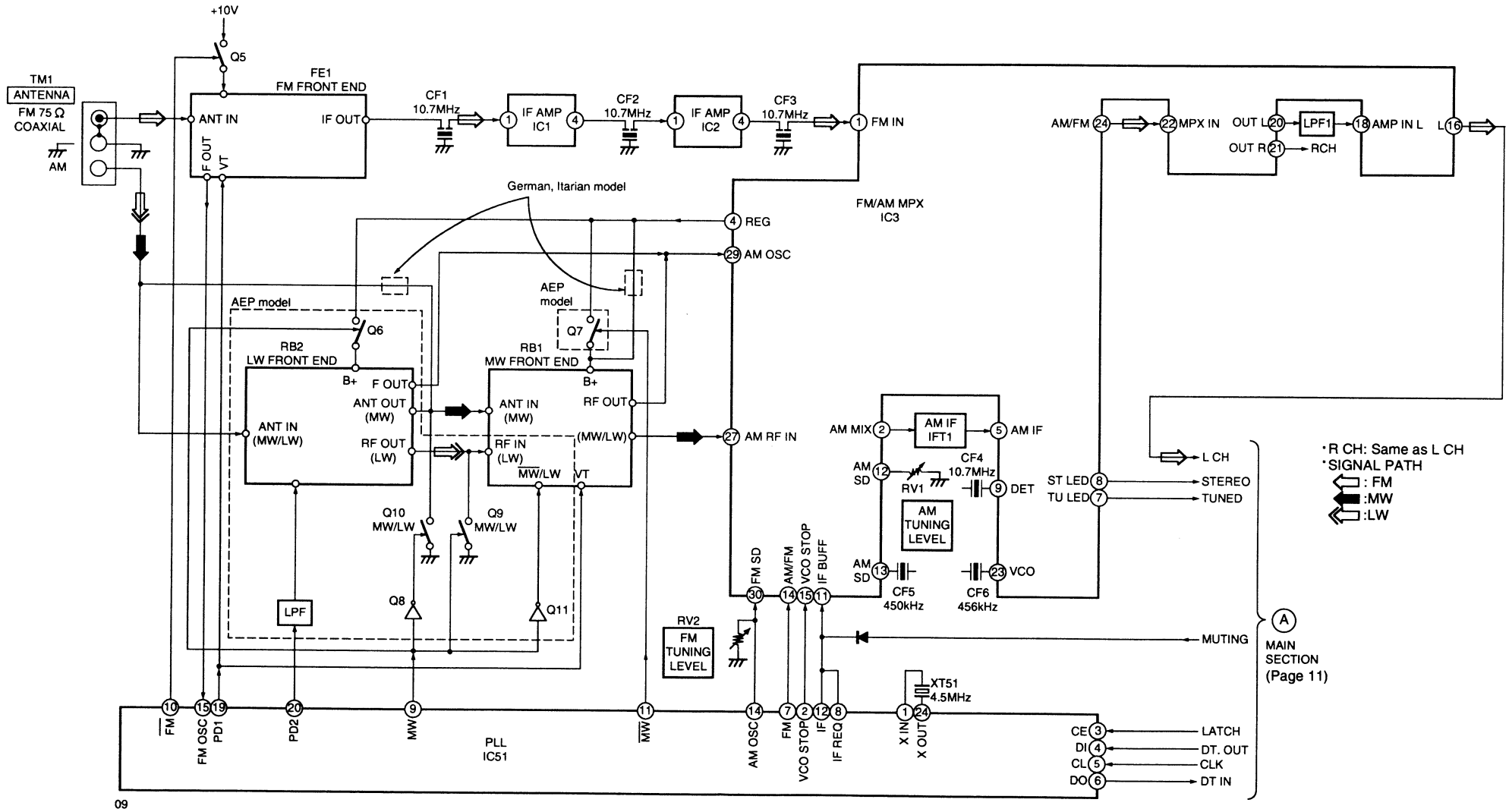
AEP Model
E Model
Australian Model
PX Model

SUPPLEMENT-1

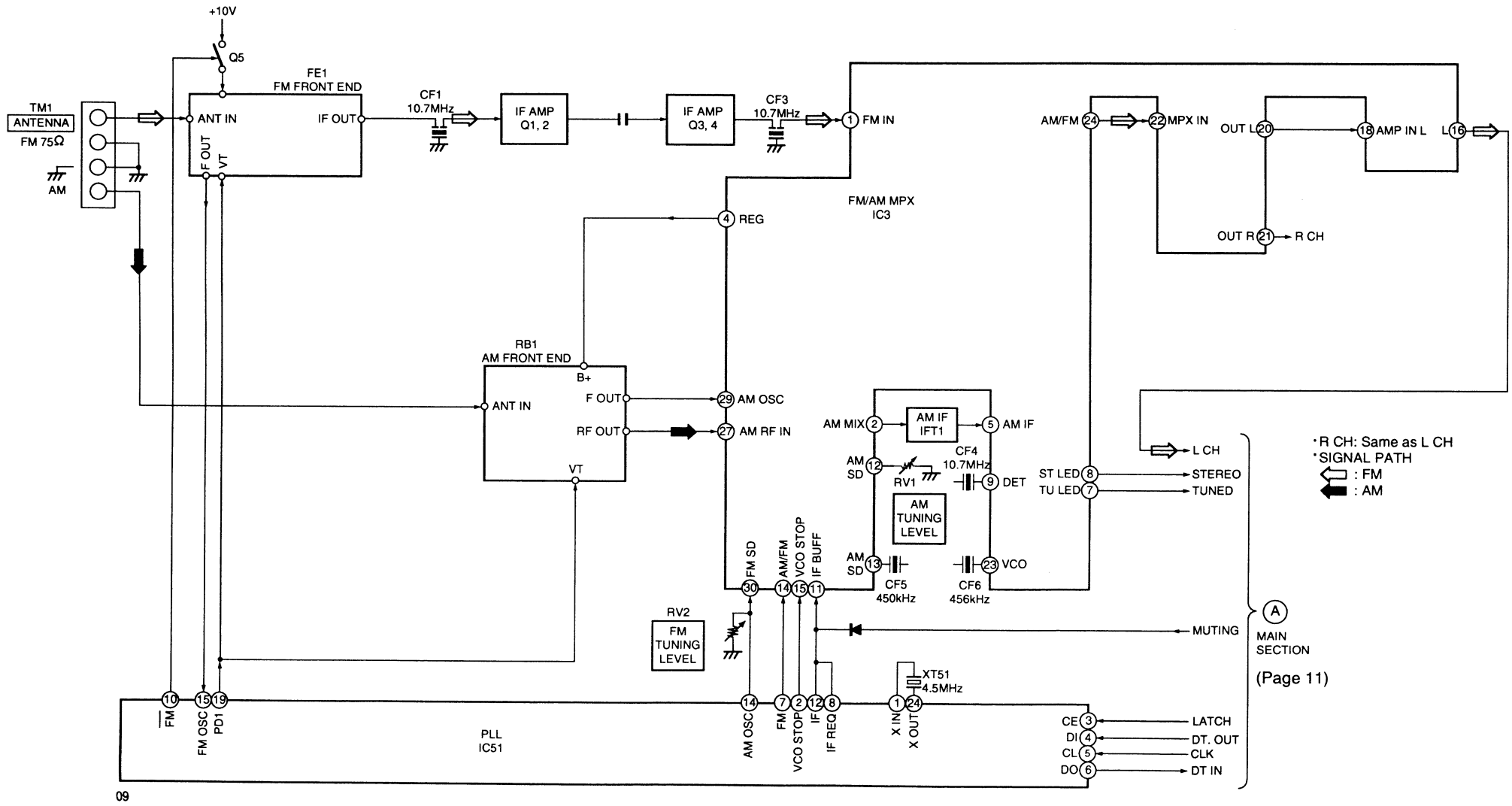
File this supplement with the service manual.

Subject : BLOCK DIAGRAM

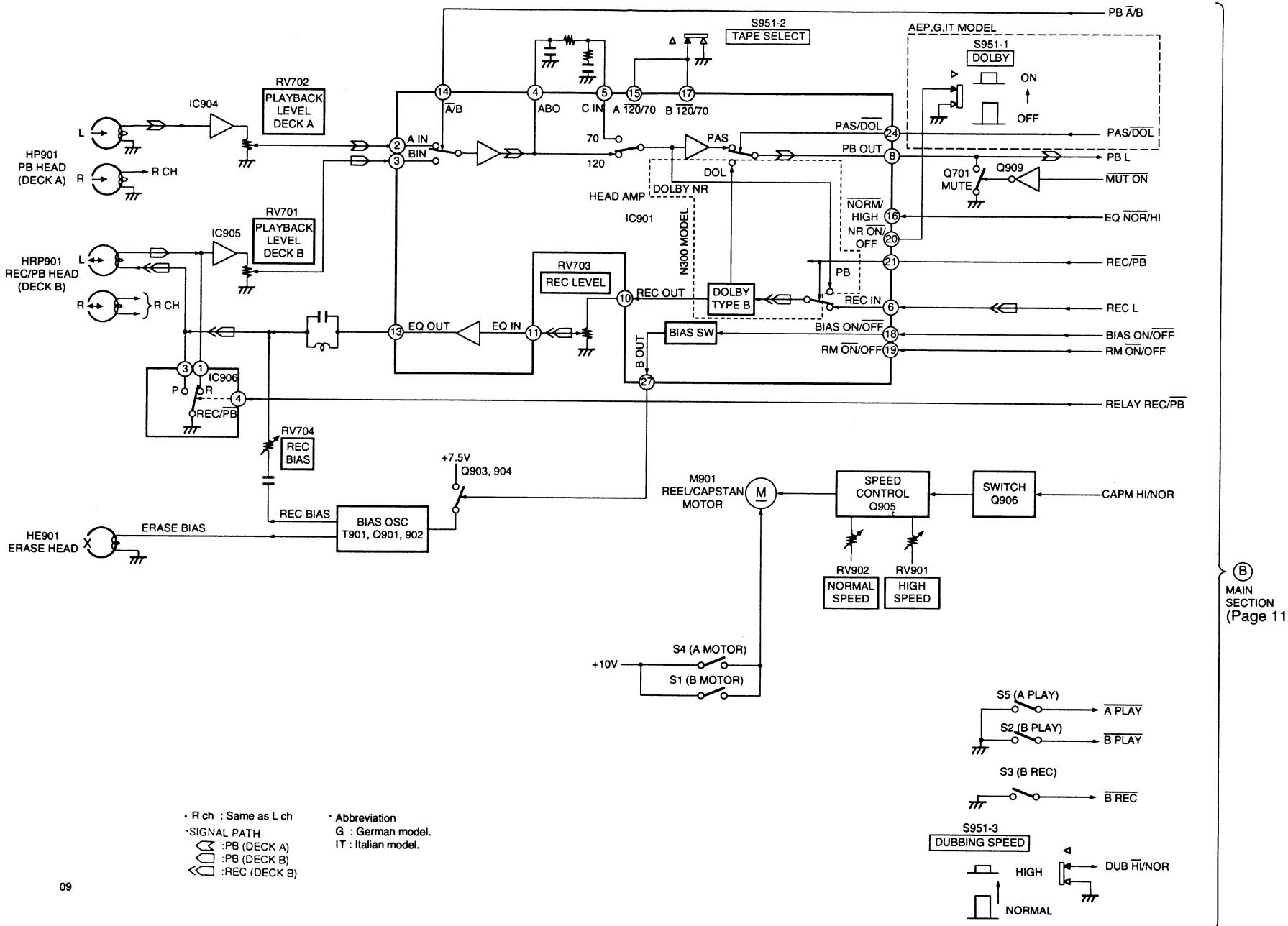
BLOCK DIAGRAM — TUNER SECTION (AEP, German, Italian model) —



BLOCK DIAGRAM — TUNER SECTION (E, Australian, Mexican, Argentine, PX model) —



BLOCK DIAGRAM — DECK SECTION —

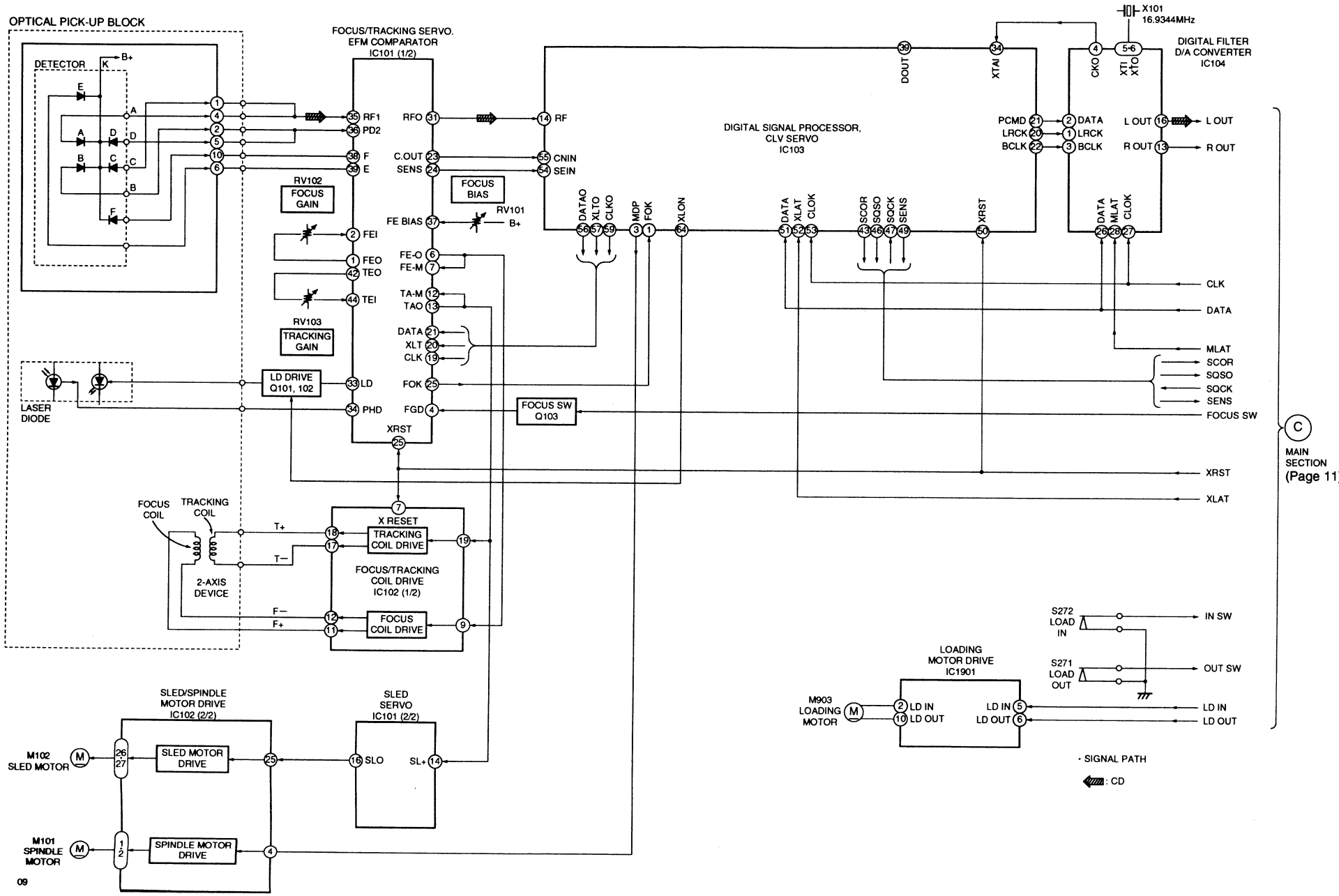


· R ch : Same as L ch
·SIGNAL PATH
:PB (DECK A)
:PB (DECK B)
:REC (DECK B)

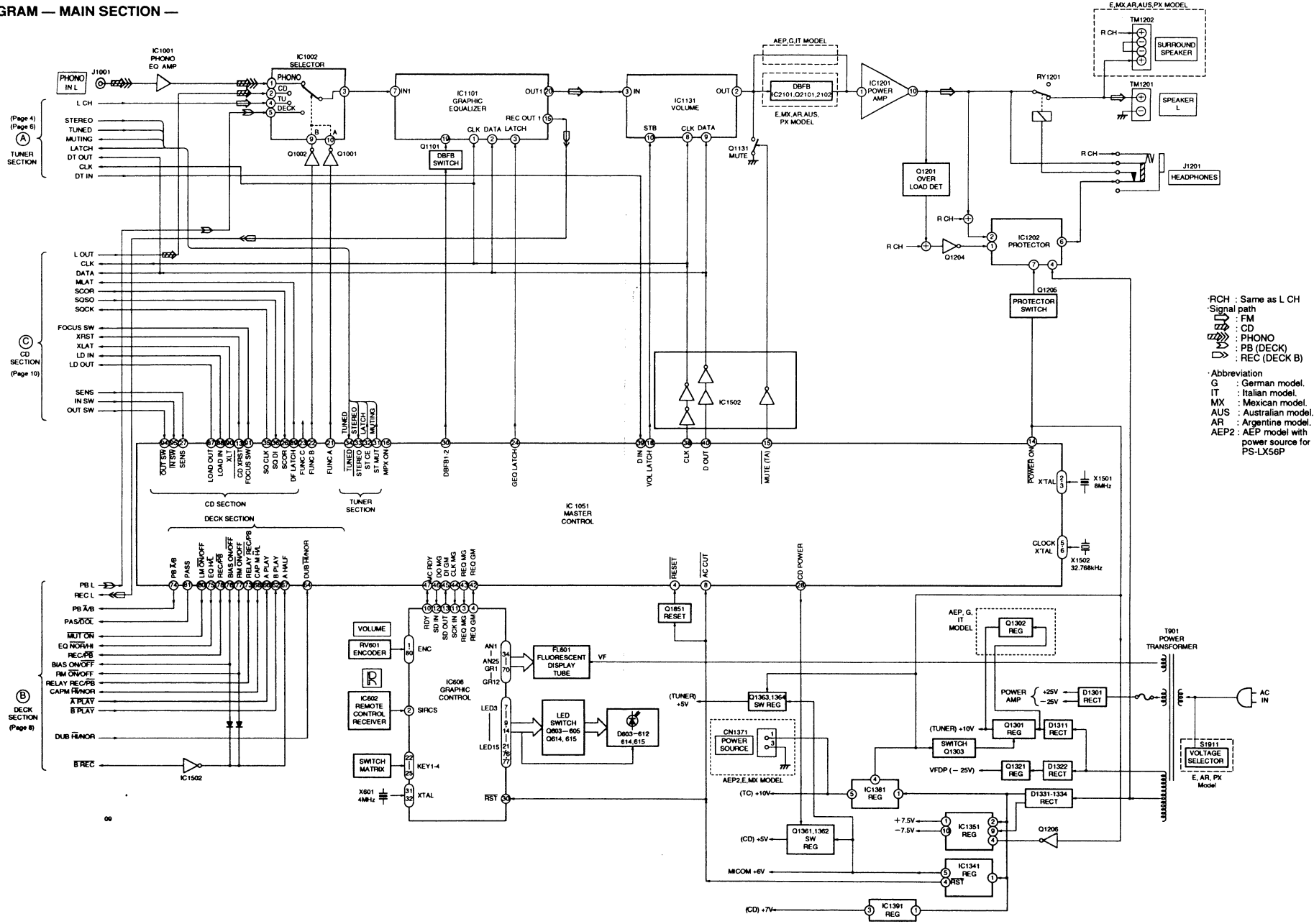
· Abbreviation
G : German model.
IT : Italian model.

09

BLOCK DIAGRAM — CD SECTION —



BLOCK DIAGRAM — MAIN SECTION —



09

9-959-983-81

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Home A&V Products Div.

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Quality Engineering Dept.

PS-LX56/LX56P

SERVICE MANUAL

Ver 1.1 2001. 07

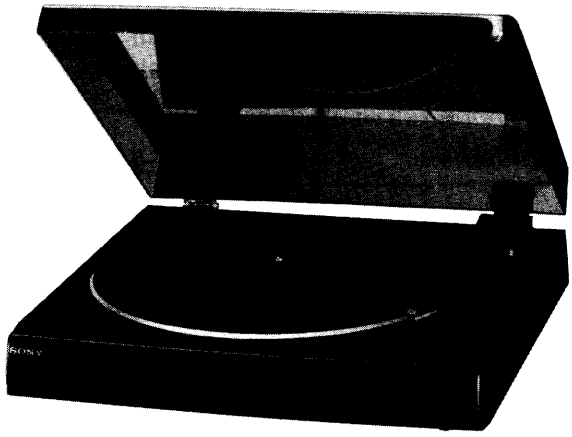


PHOTO : PS-LX56

US Model
Canadian Model
PX Model
Tourist Model
PS-LX56
AEP Model
E Model
Australian Model
PS-LX56/LX56P
UK Model
PS-LX56P

PS-LX56/LX56P are the turntable section in LBT-A190/A195/A290/A290K/A295/A390/A390K/A395/A490/A490K/A495/D150/D250/D550/G1000/G2000.

SPECIFICATIONS

	(PS-LX56)
Turntable	
Platter	30cm (12 in.)
Motor	DC servo motor
Drive system	Belt drive
Speed	33 1/3 rpm/45 rpm switchable
Wow and flutter	0.2% (WRMS)
Signal-to-noise ratio	60 dB (DIN-B)
Automatic system	Return, reject
Tonearm	
Type	Dynamically blanced
Pivot-to-stylus length	203 mm (8 in.)
Overall arm length	235 mm (9 1/4 in.)
Cartridge	
Type	Moving magnet type
Frequency response	20 Hz-20kHz
Stylus	CN-234
General	
Dimensions	355 × 94 × 345 mm(w/h/d) (14 × 3 3/4 × 13 5/8 inches)
Weight	Approx. 2.5 kg (5 lb 8 oz)
Power requirement	US and Canadian model : 120V AC, 60Hz European model : 220-230V AC, 50/60Hz Australian model : 240V AC, 50Hz Model for other countries : 110-120V/220-240V adjustable with the voltage selector AC, 50/60Hz
Power consumption	2 W
Accessory supplied	45-rpm adaptor (1)
Optional accessories	Replacement stylus CN-234 Stat spray XP-C10 Cleaner XP-C1, XP-C2

Turntable	(PS-LX56P)
Platter	30 cm
Tone arm type	Dynamically balanced
Cartridge type	Moving magnet type
Stylus	Sony CN-234 (0.6 mil diamond)
Mass	Approx. 2.3 kg (5 lb 1 oz)
Dimensions	Approx. 355 x 95 x 345 mm (14 x 3 3/4 x 13 5/8 inches) (w/h/d, including projections)

Design and specifications subject to change without notice.

Note
This appliance conforms with EEC Directive 87/308/EEC regarding interference suppression.

STEREO TURNTABLE SYSTEM

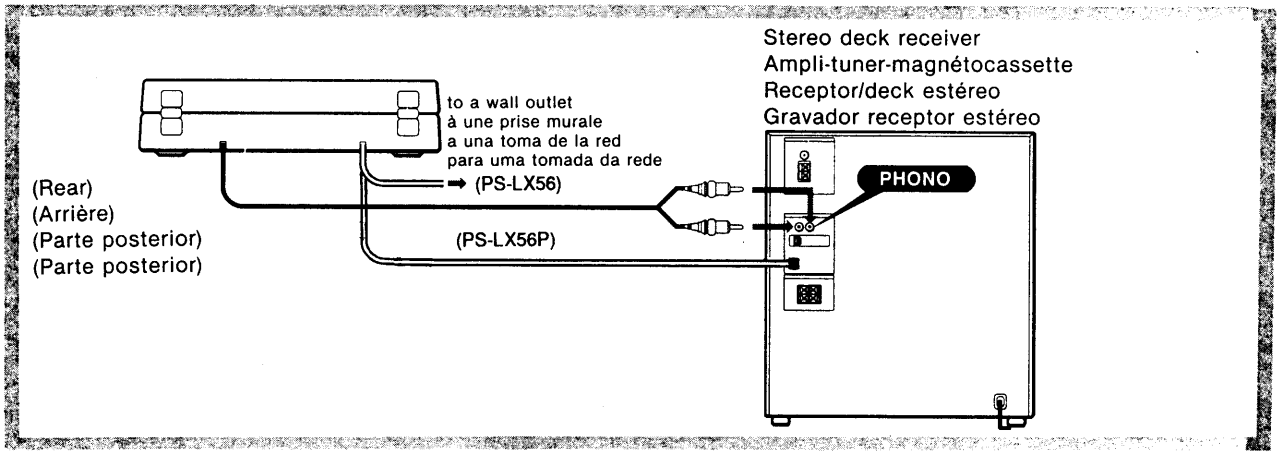
SONY

9-959-216-12
2001G0200-1
© 2001.7

Sony Corporation
Home Audio Company
Shinagawa Tec Service Manual Production Group

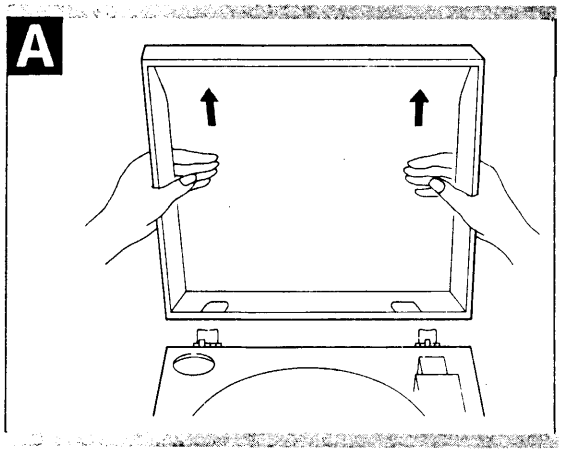
Connections

Note
Connect the red plug to the right-channel jack (R), and the white plug to the left-channel jack (L).



Notes on installation
- Place the turntable on a level surface.
- Avoid placing the unit near electrical appliances (such as a television, hair dryer, or fluorescent lamp) which may cause hum or noise.
- Place the turntable where it will not be subject to any vibration, such as from speakers, slamming of doors, etc.
- Keep the unit away from direct sunlight, extremes of temperature, and excessive dust and moisture.

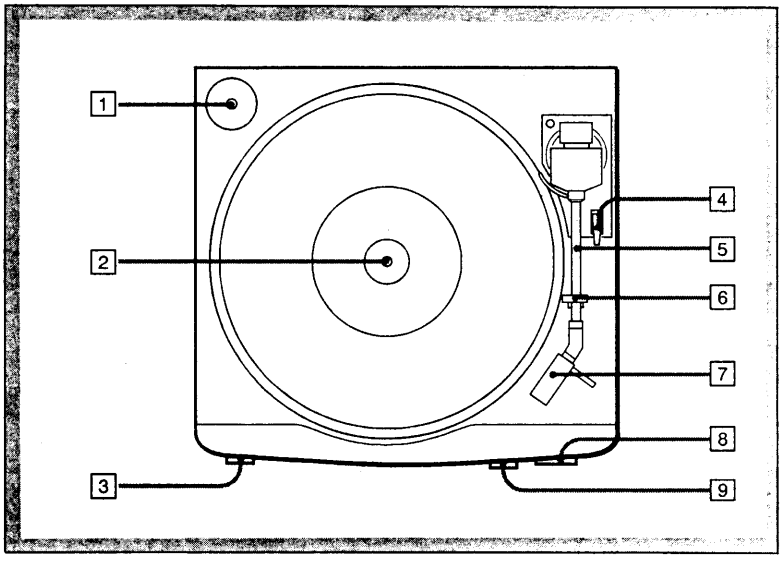
Nota
Conecte la clavija roja a la toma del canal derecho (R), y la blanca a la del canal izquierdo (L).



To remove the dust cover A

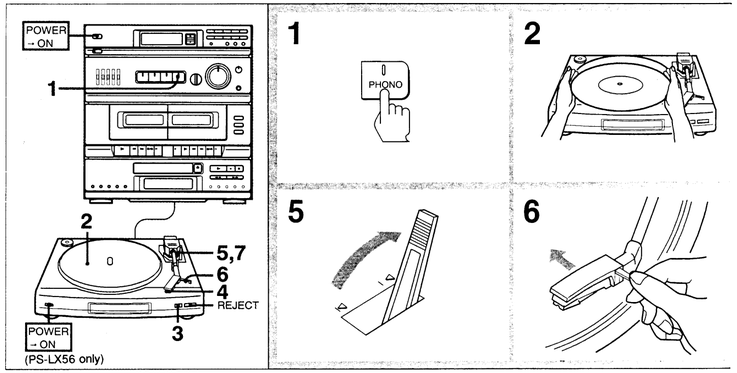
Open the cover fully and pull it up.

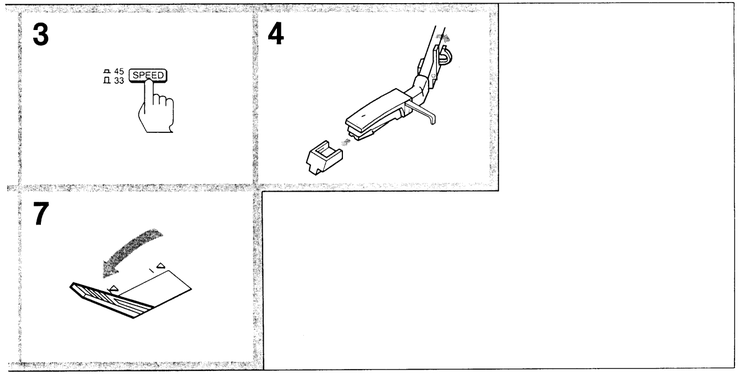
Location of Controls



1 45-rpm adaptor
2 Centre spindle
3 POWER switch (PS-LX56)
4 Cueing lever
5 Tonearm
6 Armrest
7 Cartridge
8 REJECT button
9 Speed selector

Playing Records





When the record is played to the end, the tonearm returns to the armrest and the turntable stops.

To stop during play, press REJECT.

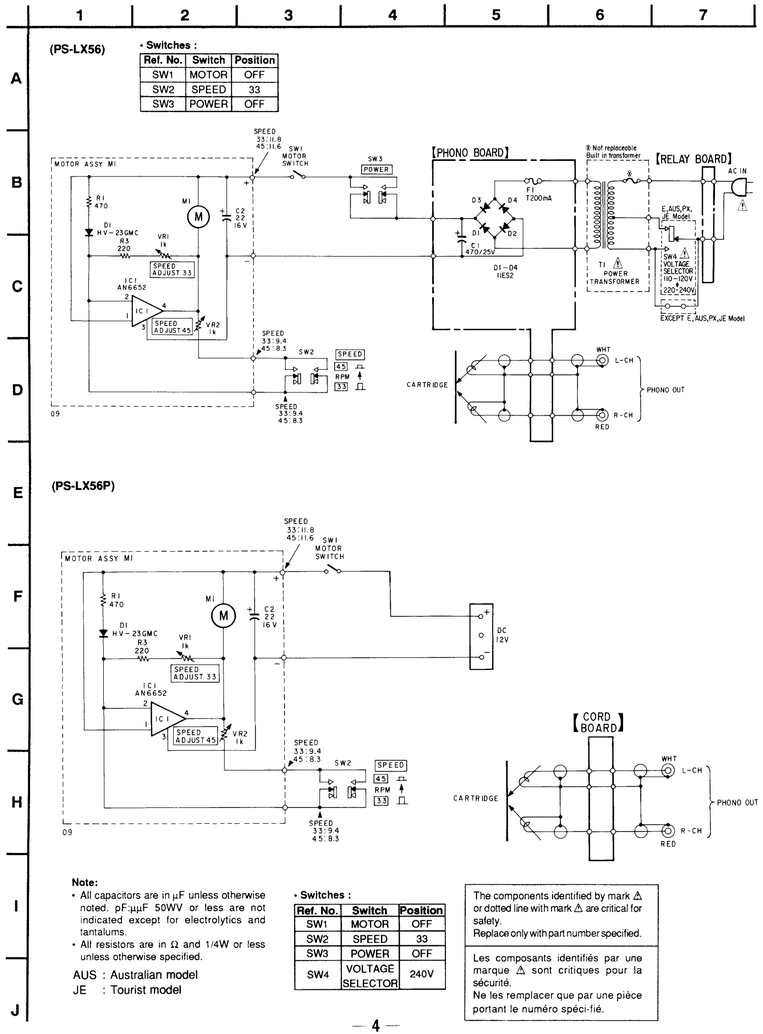
To play a different part of the record
Lift the tonearm by setting the cueing level to ▼, move the tonearm by hand to the desired point, then set the cueing lever to ▼.

To play a 17-cm record
Use the supplied adaptor

If the tonearm moves outward when you move it colse to the centre
Do not resist this movement, as it may damage the automatic return mechanism.

If the tonearm does not return to its armrest
Press REJECT.

SCHEMATIC DIAGRAMS



Note:
- All capacitors are in μF unless otherwise noted. pF:μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.

AUS : Australian model
JE : Tourist model

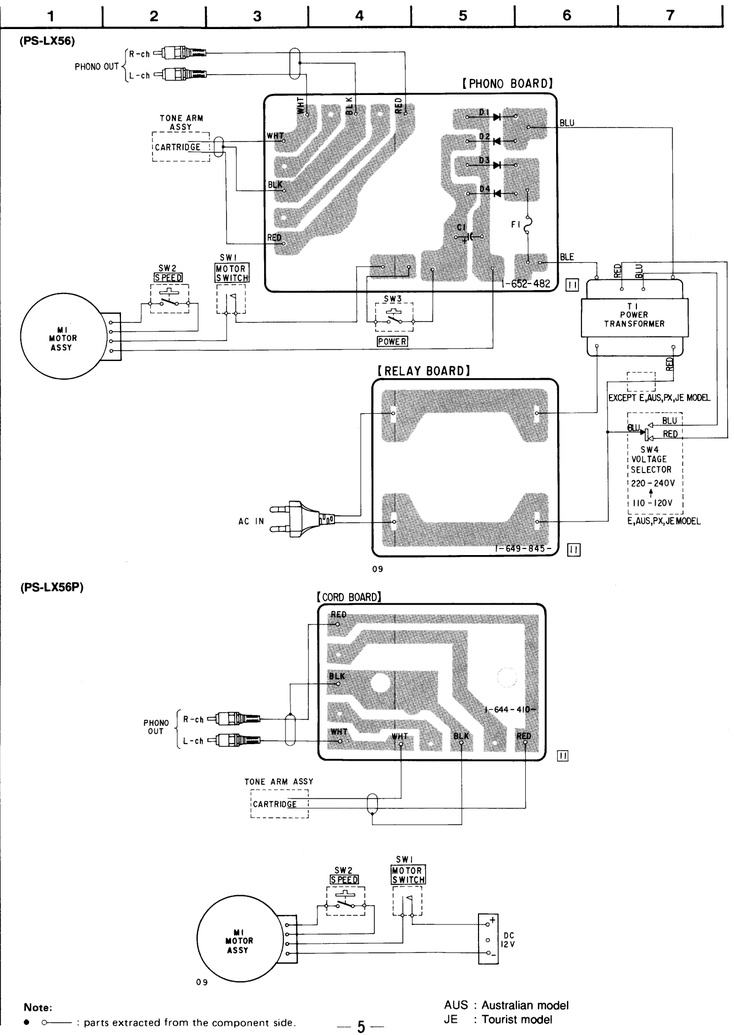
• Switches :

Ref. No.	Switch	Position
SW1	MOTOR	OFF
SW2	SPEED	33
SW3	POWER	OFF
SW4	VOLTAGE SELECTOR	240V

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spéci-fié.

WIRING DIAGRAMS



Note:
- ○—— : parts extracted from the component side.

AUS : Australian model
JE : Tourist model

EXPLODED VIEW

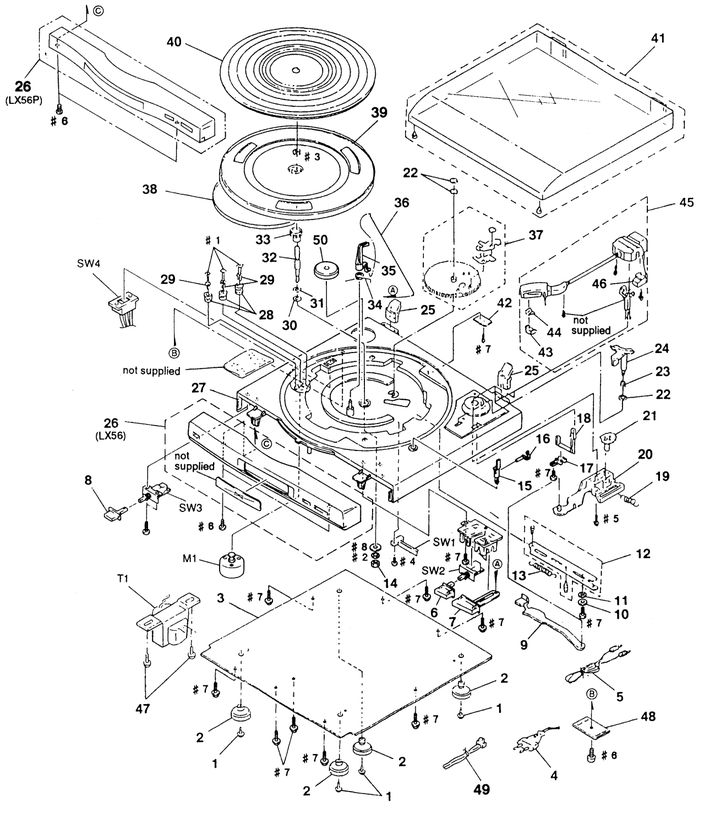
NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.

- AUS : Australian model
- CND : Canadian model
- EE : East European model
- IT : Italian model
- MX : Mexican model
- EA : Saudi Arabia model
- SP : Singapore model
- MY : Malaysia model
- JE : Tourist

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.



Ref.No.	Part No.	Description	Remark
1	4-950-497-01	FOOT SEAT	
2	4-950-490-01	PLASTIC STAND	
* 3	4-961-804-01	BUTTON BOARD	
⚠4	1-575-651-61	CORD, AC (LX56: AEP, EA, EE, IT, MX, MY, CIS, SP)	
⚠4	1-575-975-11	CORD, AC (LX56: CND, US)	
⚠4	1-590-074-11	CORD, AC (LX56: E)	
⚠4	1-690-608-11	CORD, AC (LX56: AUS)	
⚠4	1-696-570-21	CORD, AC (LX56: UK)	
5	1-555-116-11	CORD, PHONO...(BLACK)	
6	4-964-177-01	KNOB SPEED...(BLACK)	
6	4-964-177-11	KNOB SPEED ...(LX56:SILVER, SILVER METALLIC)	
7	4-964-178-01	KNOB REJECT...(BLACK)	
7	4-964-178-11	KNOB REJECT ...(LX56:SILVER, SILVER METALLIC)	
8	4-964-184-01	KNOB POWER (LX56:BLACK)	
8	4-964-184-11	KNOB POWER ...(LX56:SILVER, SILVER METALLIC)	
9	4-947-487-01	RETURN LINK	
10	4-890-173-00	WASHER	
11	3-659-350-00	WASHER	
12	A-4604-947-A	RETURN ASSY, LEVER	
13	4-947-485-01	SPRING (22)	
14	4-947-510-01	NUT	
15	4-947-491-01	ARM REST	
16	A-4660-499-A	ARM CLIP ASSY	
17	4-947-477-01	CUEING (BASE)	
18	4-947-468-01	LEVER, CUEING	
19	4-963-537-01	SPRING	
20	4-963-536-01	LINK RETURN	
21	4-963-535-01	ADJUST CAM	
22	4-947-514-01	4MM CS RING	
23	4-947-467-01	SPRING (6)	
24	4-947-466-01	TONE ARM ELEVATOR	
25	A-4660-498-A	HINGE ASSY	
26	A-4384-982-A	PANEL (B) ASSY, FRONT (LX56: SILVER)	
26	A-4411-941-A	PANEL (B) ASSY, FRONT (LX56: SILVER METALLIC)	
26	A-4660-577-A	FRONT PANEL (G) ASSY (LX56: GRAY) (US)	
26	A-4660-578-A	FRONT PANEL (G) ASSY (LX56: BLACK)	
26	A-4660-976-A	FRONT PANEL (G) ASSY (LX56P)	
* 27	4-950-487-01	MAIN CABINET (B)...(BLACK)	
* 27	4-950-487-11	MAIN CABINET (B) ...(LX56:SILVER, SILVER METALLIC)	
28	4-947-505-01	CUSHION MOTOR	
29	4-947-504-01	COLLAR	
30	3-451-162-00	WASHER (56)	
31	3-701-445-21	WASHER	
32	4-947-498-01	STELL BALL	
33	4-947-497-01	GEAR	
34	4-947-496-01	SPRING (34)	
35	4-947-495-01	WIPER REJECT	
36	4-948-101-01	SPRING (38)	
37	A-4604-916-A	GEAR ASSY, SPUR	
38	4-947-503-01	BELT	
39	4-947-494-01	TURNTABLE PLATTER	
40	4-947-539-01	RUBBER MAT	
41	A-4604-946-A	DUST COVER ASSY	
* 42	1-652-482-11	PHONO BOARD (LX56)	
* 42	1-644-410-11	CORD BOARD (LX56P)	
43	4-948-095-01	COVER, CARTRIDGE	
44	4-951-290-01	STYLUS (CN-234)	
45	A-4604-940-A	ARM ASSY, TONE	
46	4-947-464-01	COUNTER WEIGHT	
47	4-952-961-01	SCREW (LX56)	
* 48	1-649-845-11	RELAY BOARD (LX56)	
49	1-557-109-21	CORD, DC (LX56P)	
50	3-701-806-00	ADAPTOR,45	
M1	A-4604-945-A	MOTOR ASSY	
SW1	1-570-666-11	SWITCH (LEAF)	
SW2	1-571-089-11	SWITCH, PUSH (SPEED) (1 KEY)	
SW3	1-692-211-11	SWITCH, PUSH (POWER) (1 KEY) (LX56)	
⚠SW4	1-692-835-11	VOLTAGE SELECTOR (LX-56: AUS, E, MX, MY, SP)	
⚠T1	1-450-987-11	TRANSFORMER, POWER (LX56: AEP, EE, IT, CIS)	
⚠T1	1-450-987-21	TRANSFORMER, POWER (LX56: AUS, E, PX, EA, JE, MX, SP)	
⚠T1	1-450-987-31	TRANSFORMER, POWER (LX56: MY)	
⚠T1	1-450-987-41	TRANSFORMER, POWER (LX56: U, CA)	

CORD | PHONO | RELAY

ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Hardware (# mark) list is given in the last of this parts list.

- SEMICONDUCTORS
  In each case, u: μ , for example:
  uA...: μA..., uPA...: μPA...,
  uPB...: μPB..., uPC...: μPC...,
  uPD...: μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

- AUS : Australian model
- CND : Canadian model
- EE : East European model
- IT : Italian model
- MX : Mexican model
- EA : Saudi Arabia model
- SP : Singapore model
- MY : Malaysia model
- JE : Tourist

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref.No.	Part No.	Description	Remark
*	1-644-410-11	CORD BOARD (LX56P)	
		**********	
**********			
*	1-652-482-11	PHONO BOARD (LX56)	
		**********	
		< CAPACITOR >	
C1	1-126-012-11	ELECT 470uF 16V	
		< DIODE >	
D1	8-719-200-82	DIODE 11ES2	
D2	8-719-200-82	DIODE 11ES2	
D3	8-719-200-82	DIODE 11ES2	
D4	8-719-200-82	DIODE 11ES2	
		< FUSE >	
⚠F1	1-532-613-XX	FUSE TIME-LAG (T200mA)	
**********			
*	1-649-845-11	RELAY BOARD (LX56)	
		**********	
**********			

Ref.No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
	3-758-045-11	MANUAL INSTRUCTION (English, French, Spanish, Portuguese) (LX56 AEP, CND)	
	3-758-045-21	MANUAL INSTRUCTION (English) (LX56 US, UK)	
	3-758-045-41	MANUAL INSTRUCTION (German, Dutch, Swedish, Italian) (LX56 AEP, IT)	
	3-758-045-51	MANUAL INSTRUCTION (English, French, Spanish, Chinese) (LX56 AUS, E, PX, MX, EA, MY, SP, JE)	
	3-758-045-61	MANUAL INSTRUCTION (English, German, Polish) (LX56 EE, CIS)	
*	4-947-532-01	SNOW BOX (L)	
*	4-947-533-01	SNOW BOX (R)	
	3-701-806-00	ADAPTOR,45	
**********			
		********** HARDWARE LIST **********	
#1	7-621-773-87	SCREW (64)	
#2	7-623-210-22	WASHER (57)	
#3	7-624-110-04	6MM E RING	
#4	7-685-105-01	SCREW (59)	
#5	7-685-645-79	SCREW (68)	
#6	7-685-646-79	SCREW (60)	
#7	7-685-647-79	SCREW (58)	
#8	7-688-005-01	WASHER (69)	

MEMO

SS-LB200

SERVICE MANUAL

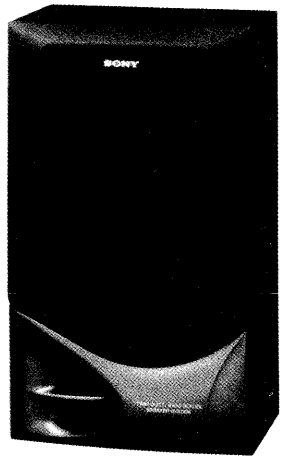


Photo : L-ch

E Model
Australian Model
PX Model

This set is the speaker system in LBT-A3000/A3000P/N200/N200K/N200P/N250/N250P.

SPECIFICATIONS

Speaker system	2-way system
Dimensions	Approx. 250 × 425 × 190 mm (w/h/d)
Mass	Approx. 4.0 kg net per speaker

SPEAKER SYSTEM

SONY®

English
95B0926-1D
Printed in Japan
© 1995. 2
Published by Home A&V Products Div.
Quality Engineering Dept.

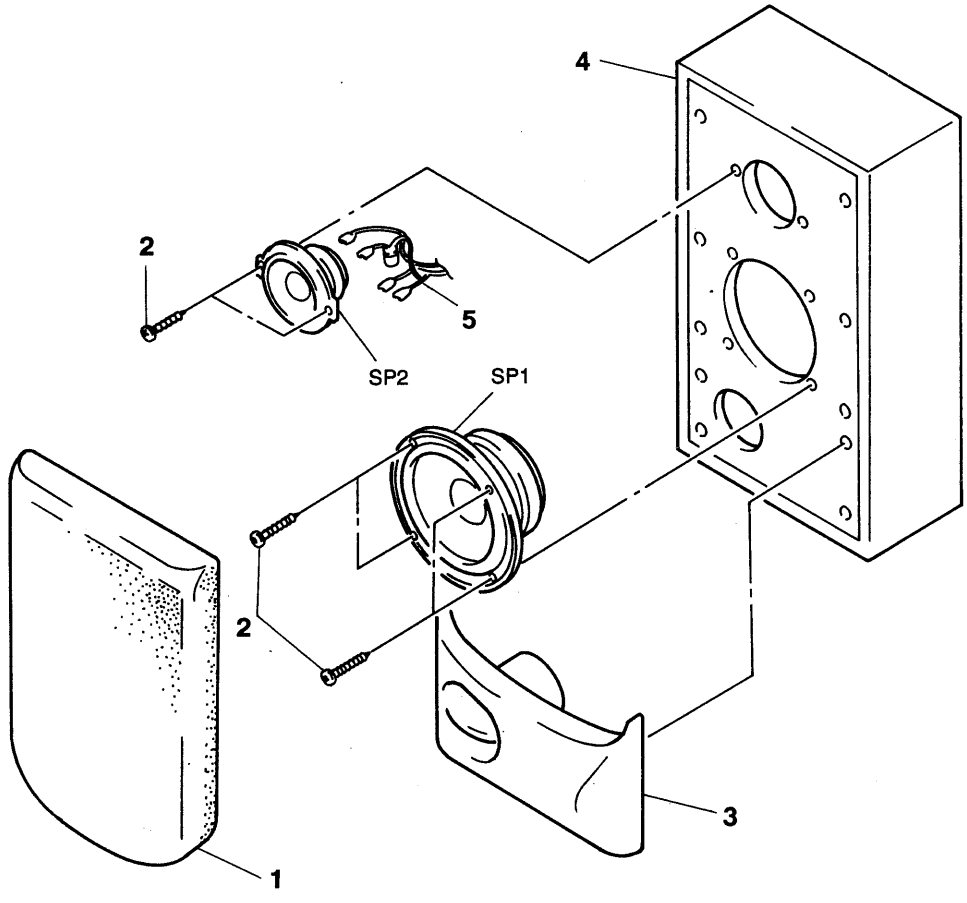
Sony Corporation
Consumer A&V Products Company
Home A&V Products Div.

9-959-969-11

EXPLODED VIEW AND PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.



Ref. No.	Part No.	Description	Remark
1	X-4945-462-2	FRAME (L) ASSY, GRILLE	
1	X-4945-463-2	FRAME (R) ASSY, GRILLE	
2	4-874-614-61	SCREW (M3.5X16)	
3	4-971-137-01	DUCT (L), ORNAMENTAL	
3	4-971-138-01	DUCT (R), ORNAMENTAL	
* 4	A-4361-260-A	CABINET (L) ASSY, SPEAKER	
* 4	A-4361-261-A	CABINET (R) ASSY, SPEAKER	
5	1-775-333-11	CORD, SPEAKER	
SP1	1-504-641-21	SPEAKER (16CM)	
SP2	1-504-789-11	SPEAKER (6CM)	

Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
*	4-971-962-01	CUSHION	